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THE

JENNERIAN DISCOVERY:

OR

TESTIMONIALS

IN FAVOUR OF THE

COW-POX INOCULATION;

WITH A STATEMENT OF

THE NATURE, PROGRESS AND ADVANTAGES

OF THAT MILD AND PERMANENT

PREVENTIVE OF THE SMALL-POX.

TO WHICH ARE ADDED

ANSWERS TO THE OBJECTIONS URGED AGAINST

ITS PRACTICE.

"We exhort every man who has any just regard for himself, for his family, for his friends, or for his country, to examine and to decide."

ROYAL JENNERIAN SOCIETY'S REPORT.

BY JOHN GRIFFIN,

MINISTER OF ORANGE-STREET CHAPEL, PORTSEA.

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IT may be expected that I ſhould aſſign ſome reaſon for publiſhing on a ſubject which belongs to a profeſſion with which I have no immediate connection. The Jennerian diſcovery appears to me to be of ſo much importance to the welfare of the community, that I think it a duty incumbent on every one whoſe avocations will admit, to make himſelf acquainted with the advantages of the vaccine inoculation, and to recommend its practice by all the influence and by every means he may poſſeſs.

Ne sutor ultra crepidam, has been applied to me with relation to my writing on this ſubject; but I beg leave to ſay, with reference to the origin of this phraſe, that though Criſpin may not have ingenuity enough to paint a good likeneſs, he may poſſeſs common ſenſe ſufficient to judge of one. I would fain perſuade myſelf, that it is not obtruding upon the limits of the medical profeſſion for a miniſter of a congregation to attract their attention to a ſubject, which to him appears, immediately connected with their domeſtic happineſs; and that it cannot reaſonably be conſidered an act of temerity in him, to preſent arguments to his friends, in order to perſuade them to guard their families from a painful and often fatal malady, by adopting a remedy which has been effectually tried on "at leaſt half a million of ſubjects;" is countenanced by the editors of the principal journals of the age; is practiſed and recommended by a large number of medical gentlemen of the firſt circles in Europe; and has obtained the public ſanction of the Imperial Parliament of Great Britain and Ireland.

I have paid a general attention to vaccine inoculation from the firſt time Dr. JENNER publiſhed on the ſubject. When in London, laſt ſummer, I had an opportunity of ſeeing, in a va-

riety of inſtances, the progreſs of the inoculation; and after converſing with ſeveral medical gentlemen and other friends, I was induced to be particularly attentive to the ſubject, with a deſign to follow the example of many clergymen of the Eſtabliſhment, and other miniſters, by communicating to the poor of my own congregation this mild preventive of the ſmall-pox.

The Rev. Rowland Hill, while at Portſea, recommended to the congregation to avail themſelves of the advantages of the cow-pox as a duty they owed to themſelves and the community. At the ſame time he gave them to underſtand that their miniſter on his return, would inoculate the poor of his congregation gratuitouſly. In conſequence of this, I had ſeveral preſſing applications from this claſs of the people to inoculate their children: to which, after conſulting ſeveral medical gentlemen and ſome other reſpectable friends, I readily complied. Having received ſome virus from Dr. Walker, reſident phyſician of the Jennerian Society, in Saliſbury-ſquare, London, I commenced inoculating, and have continued it for more than five months. Comparatively few have reſiſted infection, as I have taken the matter immediately from one ſubject to another, and inſerted it into both arms; and the progreſs of the diſeaſe (if ſuch it may be called) has been uniform, bearing the characteriſtics deſcribed by Dr. Jenner, and agreeing with the caſes I ſaw at the ſtations of the Jennerian Society. I have been applied to for matter, but have never ſupplied any, except to ſome of the medical profeſſion; as I am perſuaded, both from my own obſervation as well as from what I have read, that the practice ſhould be confined to medical gentlemen; or at leaſt to ſuch perſons as have time, opportunity and diſpoſition to pay a ſpecial attention to the ſubject. Several errors have been committed even by medical men themſelves, and ſome phyſicians have confeſſed ſeveral miſtakes in their firſt practice, principally, indeed, for want of that information which is now afforded to others by their experience and obſervation.

I have

I have obſerved in the courſe of my reading more than twenty diſtinct rules laid down by different practitioners, all of which may be neceſſary to be attended to, in order to enſure a ſucceſsful, ſafe and genuine cow-pox. Even thoſe which appear the moſt trivial, may probably in their conſequences, be of great importance. But as I do not write for the inſtruction of medical men, and it is not my deſign to inſtruct others, I forbear to mention them: for the ſame reaſons I have omitted the rules publiſhed by the Jennerian Society, leſt I ſhould induce ſome to adopt the practice upon ſlight information, and by their committing errors, bring the practice in this place into diſrepute. It is to be feared that ſad miſtakes are ſometimes committed in the ſmall-pox inoculation, by its being practiſed by perſons who do not properly underſtand it. Four children in this place, within the circle of my own information, loſt their lives by the ſmall-pox inoculation, in the early part of laſt ſpring. But having mentioned the fact, I owe it in juſtice to the medical gentlemen to ſay, that theſe children were all inoculated by women.

By converſing with a conſiderable number of perſons on the cow-pox, I found its hiſtory and advantages were comparatively but little known among the poor of this neighbourhood, and that a variety of prejudices againſt the practice had taken a firm hold of many of their minds. As I knew of no book at a price ſuited to their circumſtances, which appeared to me calculated to remove their objections, and perſuade them to adopt the remedy, I was induced to write and lay before them the preſent publication. Dr. Jenner's Treatiſes on the Variolæ Vaccinæ; the account given of him in the Public Characters for 1802; the writings of Dr. Woodville, Dr. Lettſom, Mr. Atkin, the public journals, and ſeveral other publications; but eſpecially the two volumes publiſhed by Mr. Ring—have furniſhed me with extracts for this compilation. The laſt mentioned work, price one guinea, I recommend to the attention of ſuch as wiſh

to

to make themſelves thoroughly acquainted with this ſubject. Prefixed to the ſecond volume is an accurately coloured print, repreſenting the cow-pox puſtule through all the ſtages, from the fourth day after the inoculation, to the end of the diſeaſe.

Almoſt every day affords ſome new teſtimonials in favour of vaccine inoculation. In the Hampſhire Telegraph for March 5, 1804, is a very ſeaſonable letter on this ſubject from Dr. TIERNEY, a phyſician at Brighton; which proves that nothing has occurred in the extenſive practice of this celebrated friend of vaccine inoculation to leſſen his confidence in its validity. It is thus introduced by the editor of that reputable paper:

"We feel much pleaſure in giving place to the following letter; as we conſider the ſubject to be of great public advantage, and of national importance:"

"To the Editor of the Hampſhire Telegraph.

"Sir,

"Obſerving a paragraph in your paper of laſt week, calculated to give an unfavourable impreſſion of vaccine inoculation; at the preſent moment it becomes a matter of the utmoſt conſequence that falſe reports ſhould not paſs unnoticed, particularly when the ſmall-pox is known to be ſpreading its contagion over this county; nay, in many diſtricts of this kingdom. After the moſt candid and ſerious inveſtigation, and after the ordeal through which the cow-pox has paſſed, ſanctioned as it is, at preſent, by almoſt every medical man, not only in this country, but I may add, in every quarter of the globe, where any opportunity has occurred of obſerving its happy effects, it would to me ſeem unneceſſary thus to trouble you, if I had not myſelf witneſſed the inattention medical men ſometimes have ſhewn in conducting the inoculation to the rules laid down by the immortal JENNER, and confirmed by the experience of moſt other practitioners.

"Now, Sir, when our ſhores are daily threatened by a ferocious and relentleſs foe—when every man feels the neceſſity of having

having as ſtrong and efficient force as poſſible—and when it is well known that the inoculation for the cow-pock does not incapacitate, even for the time, the ſoldier or ſailor under its influence; that it cannot be propagated by effluvia as the ſmall-pox; that it does not endanger life or limb; and that when perfectly and *truly* produced, it *protects* the individual againſt that moſt loathſome diſeaſe (the ſmall-pox.) I am ſure you will agree with me, that the lower claſſes of ſociety, who in many places are averſe ſtill, ſhould rather be taught to have confidence in it, than by vague reports be encouraged to decline a gift from heaven.

"Having, from the firſt period of Dr. JENNER's publication on the ſubject, paid it great attention; and having by deciſive experiments ſatisfied myſelf of its efficacy in protecting the conſtitution againſt the ſmall-pox, I feel it a duty I owe to ſociety to offer theſe remarks; confident, if what your paper alludes to ſhall be carefully examined, it will turn out, like all the former, to be ſpurious cow-pock.

"M. I. TIERNEY, M. D."

The number of perſons who have received vaccine inoculation, free of expence, at the ſtation of the Royal Jennerian Society, to the 20th of November laſt, was 4598: to which may be added, that 2008 charges of vaccine matter have been ſupplied, free of expence, from the central houſe, to 1559 applications; many of them from remote places of the empire, and others from foreign parts. The ſupply of virus from the other ſtations has alſo been very conſiderable.

The Rev. ROWLAND HILL, in a letter to me, ſays, "I have "no doubt but that in a ſhort time the public will take it well at "the hands of thoſe who have promoted the vaccine inoculation "in your neighbourhood. New diſcoveries find their barings by "ſlow degrees, as a variety of prejudices muſt firſt be ſubdued. "I know not, if with you I ſhould not have been afraid of the "appellation of an empiric, had I undertaken the propagation

"of

" of any thing connected with the medical profeſſion, excepting " the vaccine inoculation: but in this there is not one inſtance " in a thouſand, after the inoculation is performed, that needs " any medical ſuperintendence whatever. As to myſelf, the " longer I continue a practitioner for the good of my neigh- " bours, the more I am convinced of the utility of the diſcovery. " Not leſs than two thouſand caſes, the far greater majority of " which I inoculated with my own hand, I have had under my " own eye; and among all theſe not one ſingle inſtance has " appeared as a witneſs againſt the good effects of vaccine ino- " culation, as a protection againſt that diſeaſe which has proved " the deſtruction of its thouſands: and, as you obſerve, if here " and there a few ſolitary inſtances may be produced of perſons " who have not been protected by vaccine inoculation, it would " be unreaſonable to put theſe in oppoſition to ſo many thou- " ſands who have evidently been preſerved by it, from the in- " fection of the ſmall-pox. I have diſcovered alſo in the courſe " of my enquiries, more inſtances than one of people who have " had the ſmall-pox twice in the natural way, and of many " others who have been viſited with the ſame diſeaſe after the " common inoculation. So that the vaccine inoculation, in my " opinion, after a very full inveſtigation, affords an equal ſecu- " rity to either the inoculated or natural ſmall-pox.

As this publication is deſigned principally for the people of my own congregation, and feeling as I do, well ſatisfied that the *genuine* cow-pox inoculation is a mild and a ſafe preventive of the ſmall-pox infection, I earneſtly recommend the ſubject to their ſerious and impartial conſideration, hoping they will immediately adopt this ſalutary remedy.

PORTSEA, March 17, 1804. J. G.

THE JENNERIAN DISCOVERY.

For the diſcovery of the uſeful art of Cow-pock Inoculation, we are indebted to providence for a fortunate concurrence of circumſtances, talents, education, and ſituation. To the talents of Dr. JENNER; his education under the celebrated HUNTER; and his ſituation in the vale of *Glocester*. His enquiry into the nature of the cow-pock, commenced about the year 1776. His attention to this ſingular diſeaſe, was firſt excited by obſerving that among thoſe whom he inoculated for the ſmall-pox, many were inſuſceptible of that diſorder. Theſe perſons, he was informed, had undergone the caſual cow-pox, which had been known in the dairies from time immemorial; and a vague opinion had prevailed that it was a preventive of the ſmall-pox.

Dr. JENNER met with many apparent exceptions to this rule, which led him to aſk the opinion of other medical practitioners in the neighbourhood; who all agreed that the prophylactic power of the cow-pox was not to be relied on. This for a while damped, but did not extinguiſh his ardour; for he had the ſatisfaction to learn that the cow was ſubject to various eruptions, called the cow-pox; all of which were capable of infecting the hands of the milkers. Having ſurmounted this obſtacle, he formed a diſtinction between the different kinds of puſtulous eruptions to which the cow is liable, denominating one ſpecies the true, and all others the ſpurious cow-pox.

This impediment to his progreſs was not long removed before another of far greater importance in appearance ſtarted up. Inſtances were not wanting to prove, that when the genuine

cow-pox broke out in a dairy, ſome perſons who had experienced the diſeaſe, reſiſted the ſmall-pox; and others continued ſuſceptible of that diſtemper. This obſtacle, as well as the former, gave a painful check to his aſpiring hopes; but reflecting that the operations of nature are for the moſt part uniform; and that when two perſons have had the cow-pox, it is not probable one ſhould be perfectly ſhielded from the ſmall-pox, and the other's conſtitution remain unprotected, he reſumed his labours with redoubled ardour. The reſult was fortunate, for he now diſcovered that cow-pox, as well as ſmall-pox matter, undergoes a change; and that when it has loſt its ſpecific property, it is ſtill capable of communicating a puſtulous eruption: hence a perſon who milks a cow one day, may receive the infection of the genuine cow-pox, and be rendered for ever ſecure from the infection of the ſmall-pox; while another who milks the cow ſome days, yea even the next day after, may have a puſtulous eruption, and perhaps a conſtitutional indiſpoſition to a conſiderable extent; yet ſtill remain ſuſceptible of the ſmall-pox contagion.

While thus inveſtigating the nature of the cow-pox, he was ſtruck with the idea that it might be practicable to propagate the diſeaſe by inoculation, after the manner of the ſmall-pox; firſt from the cow, and then from one human ſubject to the other. The firſt caſe in which he put this theory to the teſt inſpired him with confidence; and a regular ſeries of experiments, which he afterwards inſtituted for that purpoſe, was crowned with ſucceſs. Several perſons were ſucceſſively inoculated from each other, with vaccine matter, and afterwards expoſed in a variety of ways to the infection of the ſmall-pox, which they all reſiſted. This happy diſcovery was communicated to the world by Dr. JENNER, in a treatiſe publiſhed in June 1798, entitled, "*An Enquiry into the Causes and Effects of of the Variolæ Vaccinæ, a disease discovered in some of the western counties of England, particularly Glocestershire; and known by the name of the Cow-pox.*" The reſult of his further experience was alſo brought forward in ſubſequent publications, in the courſe of the two ſucceeding years; and the whole work has

has been publiſhed in one volume. He has ſince written a tract, entitled, "*The Origin of Vaccine Inoculation;*" from which the preceding account is in a great meaſure extracted.

The firſt introduction of vaccine inoculation into London, was in the month of July 1798; when Mr. CLINE inoculated a child with matter received from Dr. JENNER, which ſucceeded. He afterwards put the child to the teſt of inoculation with ſmall-pox matter, in three places, which it reſiſted. On this occaſion Mr. CLINE informs Dr. JENNER, that Dr. LISTER, formerly phyſician to the Small-pox Hoſpital, and himſelf, are convinced of the efficacy of the cow-pox; and that the ſubſtitution of this mild diſeaſe for the ſmall-pox, promiſes to be one of the greateſt improvements ever made in medicine. He adds, "the more I think of the ſubject, the more I am impreſſed with its importance."

After publiſhing the firſt part of his enquiry, Dr. JENNER had no opportunity of collecting cow-pock matter during the remainder of that year. In the beginning of the year 1799, the diſeaſe broke out in a dairy farm, in Gray's-Inn-Lane. With matter obtained at this place Dr. WOODVILLE inoculated ſeveral perſons, who were afterwards admitted into the Small-pox Hoſpital, and expoſed to the infection of the ſmall-pox.

It is probable they had alſo been expoſed to the ſame infection previous to inoculation; for a majority of them had puſtulous eruptions. Others were inoculated from theſe. In ſome inſtances cow-pock matter was inſerted in one arm, and ſmall-pock matter in the other; on the ſame day, in ſome inſtances, cow-pock matter was inſerted firſt, and ſmall-pock matter on a ſubſequent day. In other inſtances ſmall-pock matter was firſt inſerted.

When ſuch experiments were made, and the patients were thus expoſed to the double riſk of catching the ſmall-pox, either by inoculation, or by expoſure to the natural infection; and thoſe medical gentlemen, who adopted the practice, were in general ſupplied from this ſource; they might well be diſappointed in their expectations of producing a mild diſeaſe, ſuch as that deſcribed by Dr. JENNER. Such was the terror inſpired

by the firſt reports, of vaccine inoculation in London; together with miſtakes, at leaſt, if not falſehoods, propagated with great induſtry; that it was in danger of being totally laid aſide. This, inſtead of checking, excited enquiry, and by making medical gentlemen more exact in their obſervations, and critical in their experiments, tended to eſtabliſh the truth of the cow-pox being a mild diſeaſe, and a preventive of the ſmall-pox, upon a broader and firmer baſis. This was confirmed by more favourable reports by other practitioners, and by a teſtimonial recommending the practice, ſigned by a conſiderable number of the moſt eminent phyſicians and ſurgeons in the Metropolis, inſerted in the Medical Journals, and other reſpectable channels of information. Occaſional obſervations publiſhed by Dr. JENNER alſo, had no ſmall ſhare in producing this happy change.

DESCRIPTION OF THE NATURAL OR CASUAL COW-POX.

Dr. JENNER, in his deſcription of the natural cow-pock, ſays "There is a diſeaſe to which the horſe, from his ſtate of domeſtication, is frequently ſubject. The farriers have termed it the greaſe. It is an inflammation and ſwelling in the heel, accompanied at its commencement with ſmall cracks or fiſſures, from which iſſues a limpid fluid, poſſeſſing properties of a very peculiar kind. This fluid ſeems capable of generating a diſeaſe in the human body (after it has undergone the modification I ſhall preſently ſpeak of), which bears ſo ſtrong a reſemblance to the ſmall-pox, that I think it highly probable it may be the ſource of that diſeaſe. In this dairy country, a great number of cows are kept, and the office of milking is performed indiſcriminately by men and maid ſervants. One of the former having been appointed to apply dreſſings to the heels of a horſe affected with the malady I have mentioned, and not paying due attention to cleanlineſs, incautiouſly bears his part in milking cows, with ſome particles of the infectious matter adhering to his fingers. When this is the caſe, it frequently happens that a diſeaſe is communicated to

the cows, and from the cows to the dairy-maids, which ſpreads through the farm until moſt of the cattle and domeſtics feel its unpleaſant conſequences. This diſeaſe has obtained the name of the cow-pox.

"It appears on the nipples of the cows, in the form of irregular puſtules. At their firſt appearance they are commonly of a paliſh blue, or rather of a colour ſomewhat approaching to livid, and are ſurrounded by an inflammation. Theſe puſtules, unleſs a timely remedy be applied, frequently degenerate into phagedenic ulcers, which prove extremely troubleſome. The animals become indiſpoſed, and the ſecretion of milk is much leſſened. Inflamed ſpots now begin to appear on different parts of the hands of the domeſtics employed in milking, and ſometimes on the wriſts, which run on to ſuppuration, firſt aſſuming the appearance of the ſmall veſications produced by a burn. Moſt commonly they appear about the joints of the fingers, and at their extremities; but whatever parts are affected, if the ſituation will admit, the ſuperficial ſuppurations put on a circular form, with their edges more elevated than their centre, and of a colour diſtantly approaching to blue; abſorption takes place, and tumours appear in each axilla.* The ſyſtem becomes affected, the pulſe is quickened; ſhiverings, ſucceeded by heat, general laſſitude, and pains about the loins and limbs, with vomiting, come on. Theſe ſymptoms, varying in their degrees of violence, generally continue from one day to three or four, leaving ulcerated ſores about the hands, which, from the ſenſibility of the parts, are very troubleſome, and commonly heal ſlowly, frequently becoming phagedenic, like thoſe from whence they ſprung. During the progreſs of the diſeaſe, the lips, noſtrils, eye-lids, and other parts of the body, are ſometimes affected with ſores; but theſe evidently ariſe from their being heedleſsly rubbed or ſcratched with the patient's infected fingers. No eruptions on the ſkin have followed the decline of the feveriſh ſymptoms in any inſtance that has come under my inſpection, one only excepted, and in this caſe a few appeared on the arms. Thus

* Arm Pit.

Thus the diſeaſe makes its progreſs from the horſe (as I conceive) to the nipple of the cow, and from the cow to the human ſubject."

THE SIGNS OF INFECTION, AND THE DESCRIPTION OF THE INOCULATED COW-POX.

The Royal Jennerian Society in their deſcription of the inoculated cow-pox, ſay, "When vaccine inoculation proves ſucceſsful, a ſmall red ſpot, with a degree of elevation which may be felt, commonly commences on the third day. When examined with a magnifying glaſs, it ſeems to conſiſt of a ſmall tumour, ſurrounded by a ſlight efflorescence.

"Between the third and ſixth day, a veſicle* appears, the ſhape and magnitude of which depend much on the mode in which the inoculation has been performed: when it is performed by a ſlight puncture, the veſicle will be ſmall and circular.

"The edge of the vaccine veſicle is elevated and well defined; the centre is depreſſed, and a ſpeck is there viſible of a darker colour than the reſt of the ſurface. This veſicle is diſtinguiſhed from other veſicles by the peculiarity of its ſtructure, which is cellular, and ſomewhat hard and firm. At firſt it is of a light pink colour, ſometimes blended with a bluiſh tint, gradually changing in its progreſs into a pearl colour. Its contents are limpid and almoſt colourleſs. It commonly increaſes in ſize till about the tenth day. In its early ſtages it has uſually a ſmall inflamed ring round its baſe, which about the ninth day begins to ſpread rapidly; and about the tenth, forms an areola,† more or leſs circular, an inch and a half or more in diameter. This areola is of a pink, ſcarlet or crimſon hue; and is attended with ſome degree of hardneſs and tumefaction. It continues nearly ſtationary a day or two, and then begins to fade; ſometimes forming on its decline, two or three concentric circles. When the areola is perfectly formed, the veſicle begins to decline: firſt it turns brown in the centre; then it is gradually converted into

* Pock. † A coloured circle ſurrounding the Pock.

into a hard, ſmooth, ſhining ſcab, of a dark mahogany brown colour, approaching to black; and its general appearance has not unaptly been compared to the ſection of a tamarind ſtone. This ſcab commonly falls off about the end of the third week; and leaves a circumſcribed cicatrix,* clearly denoting, that the true ſkin has been affected.

" In the computation of time, the day of inoculation is to be conſidered as the firſt day.

" *Occaſional Deviations of the Vaccine Veſicle, from its ordinary Appearance and Character.*—Deviations are occaſionally met with even in the genuine vaccine veſicle, chiefly with regard to its riſe, duration, and contents. It ſeldom or never appears earlier, but often later than the period already mentioned; ſometimes not till after the expiration of a fortnight or three weeks; but if it then makes a regular progreſs, it renders the patient equally ſecure, as if it had appeared at the uſual time. Sometimes the veſicle is ruptured by external violence. In that caſe the ſcab will in general be leſs firm, and of a lighter colour. Occaſionally alſo, inſtead of the regular progreſs to deſiccation, as above deſcribed, it paſſes into a ſtate of ulceration, with a much more extended inflammation. The contained fluid, inſtead of being limpid as uſual, is now and then found opake.

" *Spurious puſtules which afford no ſecurity againſt the Small-pox.*—The ſucceſs of the operation is doubtful when there is any conſiderable deviation from the uſual courſe of the diſeaſe; whether premature inflammation, irritation, itching, or veſication† occurs; or the progreſs of the veſicle is too rapid, its contents yellow or opake, its texture ſoft, its centre elevated, or its form not well defined; or whether a premature efflorescence takes place, and diſtinct, vivid, circumſcribed areola is wanting. This anomalous veſicle, or ſpurious puſtule, as it is called, is more liable to be broken, than the regular genuine veſicle, from its centre being more elevated, and its texture leſs firm. When broken, it is frequently ſucceeded by ulceration; or by a light brown, or amber-coloured creeping ſcab.

" *Probable Cauſes of ſpurious Puſtules.*—Spurious puſtules may be

* Scar. † Bliſtering.

be occaſioned not only by matter taken from a ſpurious puſtule, but alſo by matter taken from a genuine veſicle, at too late a period; or by that which has been injured by keeping, expoſure to heat, or any other cauſe. They may alſo be occaſioned by uſing ruſty lancets in inoculating; by rude and unſkilful methods of performing the inoculation; or by the genuine veſicle having been deſtroyed at an early ſtage; and the regular progreſs of the diſeaſe thus interrupted.

"*Conſtitutional Symptoms.*—The conſtitutional ſymptoms ſometimes occur at a very early period; but more commonly from the ſeventh to the eleventh day. In ſome caſes the patient is drowſy; in others reſtleſs. Sometimes there is a chilline ſs, ſucceeded by heat, thirſt, head-ache, and other marks of febrile affection. Now and then a ſickneſs or vomiting takes place, eſpecially in infants. The conſtitutional ſymptoms, of whatever kind, are in general ſlight and tranſient, and ſuch as require no remedy. In a great proportion of caſes there is no perceptible indiſpoſition; nevertheleſs the perſon vaccinated is not the leſs ſecure from the future infection of the ſmall-pox, provided the progreſs of the veſicle has been regular and complete. Care muſt be taken not to confound the ſymptoms of infantile or other diſeaſes with thoſe of vaccine inoculation.

"*Medical Treatment.*—In general no medicine is required in this mild affection; but if the ſymptoms happen to run a little higher than uſual, the ſame remedies are to be applied, as if they proceeded from any other cauſe. No preparation is neceſſary; and no cathartics need be given either before or after vaccination. Should inflammation of the arm exceed the uſual bounds, which rarely happens but from tight ſleeves, preſſure, or friction, it may ſoon be checked by the very frequent application of compreſſes of linen dipped in water, *aqua litharg yri, acetati composita,** or a ſolution of one drachm of *cerussa acetata*, in a pint of water. Theſe are to be applied cold.

"If the ſcab be rubbed off prematurely, and ulceration take place, cooling and aſtringent applications may be uſed, ſuch as a drop of *aqua litharg yri acetati,*† which ſhould be allowed to dry

* Goulard Water. † Extract of Saturn.

dry on the part, and then be covered with compreſſes, dipped in water, (or any of the ſaturnine applications above mentioned,) and frequently renewed. When the ulceration is deep or extenſive, a poultice, either of bread and milk, or of bread with any of the ſaturnine preparations, may be applied, as the caſe ſeems to require. They muſt never be applied, till they are nearly or quite cold.

"In ſuch foul and obſtinate ſores as reſiſt the foregoing applications, the *unguentum hydrargyri nitrati*, the *argentum nitratum*, or other ſimilar applications, are ſometimes reſorted to with advantage. A ſingle dreſſing with theſe ſubſtances is uſually ſufficient; after which the ſore heals under the mildeſt applications.

"Spurious puſtules are frequently followed by ulceration at an early period. This ulceration is to be treated in the ſame manner as if it proceeded from the genuine ſpecies. An aſſurance of perfect ſecurity from vaccine inoculation can only be obtained by carefully obſerving the whole progreſs of the diſeaſe. If any doubt remain, the operation ought to be repeated.

"When the patient has been previouſly expoſed to the infection of the ſmall-pox, that diſeaſe will be ſuperceded more or leſs, according to the time which is ſuffered to elapſe, before the inoculation of the cow-pock.

"The advantages of vaccine inoculation being now fully aſcertained, it is the duty of every member of ſociety, and particularly of every member of the medical profeſſion, to diſcourage the inoculation of the ſmall-pox."

BRITISH TESTIMONIALS AND PRACTICE.

London.—The principal teſtimonials in favour of the Cow-pock Inoculation have been given by the faculty in London, who have done themſelves and their profeſſion an indelible honour; and have been the principal cauſe of diffuſing this unparalleled medical bleſſing through Europe, and of ſending it into Aſia and America.

In the Medical Journal, and the Medical Review, for July 1800, was published a teſtimonial in favour of the cow-pox, ſigned by a number of phyſicians and ſurgeons, whoſe names are recited in the two volumes publiſhed by Mr. RING.

The teſtimonial in favour of vaccine inoculation is as follows: "Many unfounded reports having been circulated, which have a tendency to prejudice the public againſt the inoculation of the cow-pox; we, the underſigned phyſicians and ſurgeons, think it our duty to declare our opinion, that thoſe perſons who have had the cow-pox, are perfectly ſecure from the future infection of the ſmall-pox." We alſo declare that the inoculated cow-pox is a much milder and ſafer diſeaſe, than the inoculated ſmall-pox. The number of phyſicians in London and its vicinity, who ſigned this teſtimonial, either when it was firſt publiſhed or have added their ſignatures ſince, amount to fifty-five; and the number of ſurgeons to one hundred and twenty-five. In this liſt are many names of the firſt rank in medical ſcience, in Britain and in Europe.

At a meeting of the Medical Society, March 29th, 1802, it was unanimouſly reſolved that the members of the Medical Society of London, taking into conſideration the very important diſcovery made by Dr. JENNER, are of opinion that great benefit will accrue to the inhabitants of theſe iſlands, and to mankind in general, from the introduction of vaccine inoculation; and from their own experience, as well as from the extenſive and ſucceſsful trials made in various parts of the world, that it will in all probability ultimately eradicate the ſmall-pox; one of the moſt fatal diſeaſes to which the human ſpecies is liable.

Reſolved, that a copy of this reſolution, ſigned by the preſident, be preſented to Dr. JENNER.

It is but juſtice to the gentlemen of the Mary-le-bone Diſpenſary to ſtate, that they were among the firſt to adopt this beneficial practice. It was alſo ſome time ago introduced by Mr. Ford, at the Weſtminſter General Diſpenſary. It is now introduced into the Public Diſpenſary, in Cary-ſtreet. The committee of that inſtitution have circulated a paper, announcing that the phyſicians and ſurgeons of the charity, will inoculate for the cow-pox all ſuch perſons as are recommended by the Governors

Governors for that purpoſe. In purſuance of the aforeſaid reſolution, the medical officers of the Diſpenſary give notice that all perſons deſirous of being inoculated for the cow-pox, may attend at the Diſpenſary for that purpoſe, on any Tueſday or Saturday, at twelve o'clock; and earneſtly recommend the following facts to the conſideration of all whom the ſubject might concern.

"*No one who has once had the cow-pox, can afterwards take the ſmall-pox.* This has been proved in many thouſands of caſes, in which perſons, after having had the cow-pox, have been inoculated for the ſmall-pox, or have even lived in the ſame room, or lain in the ſame bed, with others covered with that diſeaſe; and yet have not received the infection. This being the caſe, it is better to inoculate with the cow-pox than the ſmall-pox, for two reaſons.

"1. Becauſe the cow-pox is a milder diſeaſe. It occaſions but little pain or fever, and is not followed by any of the painful and dangerous complaints which are often produced by the ſmall-pox.

"2. Becauſe the infection of the cow-pox cannot be communicated by the breath or perſpiration; whereas there is always danger, that a perſon who has even the inoculated ſmall-pox, will communicate the diſeaſe to others; and in this manner the inoculation of one perſon has often occaſioned the loſs of a great number of lives. We therefore adviſe all thoſe who regard the health and life of their children, the ſafety of their friends and neighbours, or the good of the community at large, to avail themſelves of the opportunity now offered to them, of preventing, by eaſy and certain means, one of the moſt loathſome and fatal diſeaſes to which the human body is ſubject.

Signed, ROBERT WILLAN, T. A. MURRAY, } Phyſicians.
JOHN PEARSON, Surgeon."

The following is the teſtimonial of the Preſident and Members of the Phyſical Society of Guy's Hoſpital, in which they ſay, "Deeply impreſſed with the importance of the diſcovery of vaccine inoculation, we are anxious to expreſs our opinion of its efficacy, and our profound veneration for its author, Dr.

JENNER. We entertain a perfect conviction, that this inoculation is a certain preventive of the small-pox; and trust the period is not remote, when that dreadful scourge of the human race will become totally extinct. We are fully persuaded that when vaccination has been *properly conducted*, no instance has occurred of its having occasioned any dangerous consequence, or failed to produce those effects, which its discoverer has uniformly set forth. We further state our belief that the vaccine inoculation, from its superior mildness, will not call forth those latent seeds of disease, which occasionally arise after the small-pox, even under the best management; and which otherwise might never have taken place. We feel the warmest sensations of gratitude and respect, for the liberal manner in which the author has communicated his discovery, uninfluenced by any motive of self-consideration. And we contemplate the discovery itself as a memorable event in the annals of medicine."

THE BRITISH FLEET.—The physicians and surgeons of the Fleet have done themselves great honour, and proved their high sense of the validity and utility of the Jennerian Discovery, by presenting a Gold Medal to Dr. JENNER, together with a suitable address. In this address they say, by enquiries instituted in the Channel, it has been ascertained that the small-pox has been imported more than a hundred times within the last seven years; and in twenty different instances within the last six months by the grand fleet alone. They remark that it is no wonder the small-pox was attended with uncommon mortality, when the subject whom it attacked was so ill prepared for its reception.

The address then states, that as far as vaccine inoculation has been practised in the Navy, it has been crowned with success. Those who have undergone that operation, were not even entered on the sick list.

The authors of this important and memorable address then declare, "that although prevented by their situation from receiving the earliest intelligence of improvements in medical science, they have not been passive spectators of an event so singular, as a discovery of a substitute for the small-pox; an event which the philosopher will contemplate with wonder, and

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the friend of the human ſpecies with exultation." This addreſs is ſigned by five phyſicians, and above eighty ſurgeons of the Navy. Since that period vaccine inoculation has not only been generally practiſed in the Army and Navy, at home, but it has been introduced into *Gibralter*, *Minorca* and *Malta*, and into the Britiſh Fleets in the *Mediterranean*, by the zealous and indefatigable exertions of Dr. MARSHALL and Dr. WALKER. Theſe gentlemen inoculated the ſoldiers in the different garriſons, together with their wives and children; and alſo extended the benefits of the Jennerian diſcovery to all ranks of people who would accept of that bleſſing. Our brave ſoldiers and ſailors employed in the expedition to Egypt, were vaccinated by orders from the Duke of York, and the Lords of the Admiralty. The ſmall-pox was in conſequence twice extinguiſhed in the fleet. For theſe important ſervices rendered to the State, Dr. MARSHALL, and Dr. WALKER received the thanks of Lord KEITH and Lord HUTCHINSON, the two commanders of the Britiſh forces by ſea and land.

THE IMPERIAL PARLIAMENT has ſanctioned the utility of vaccine inoculation by voting to Dr. JENNER ten thouſand pounds, excluſive of the fees of office; in conſequence of a report preſented by the committee of the Houſe of Commons, to whom Dr. JENNER's petition was referred. The committee ſtate in their report, "That the utility of vaccine inoculation is confirmed by the teſtimony of a number of witneſſes of the higheſt character and moſt extenſive experience in the profeſſion," confirmed by the united teſtimony of the Duke of Clarence, the Earl of Berkeley, Lord Rous, Sir George Baker, and Sir Walter Farquhar. Many of the witneſſes had ſubmitted their own children to the cow-pox inoculation, and others had practiſed it with the happieſt ſucceſs.

Dr. WOODVILLE ſtated that ſeven thouſand five hundred patients had been inoculated for the vaccine diſeaſe, at the Small-pox Hoſpital, up to January 1803; half of that number had ſince been inoculated with ſmall-pox matter, but in vain.

Dr. MARSHALL ſtated that the number inoculated under his direction was more than ten thouſand, many of whom were afterwards expoſed to variolous contagion, which they reſiſted.

Dr.

Dr. NELSON ſtated, that ſeven hundred perſons had been inoculated with the cow-pock, at the Vaccine Pock Inſtitution, and that many of them had ſince been expoſed to the ſmall-pox without effect. The Rev. Mr. JENNER had inoculated three thouſand perſons with vaccine matter, without meeting with one unfavourable caſe. More than two hundred of his patients had been ſubject to the teſt of the ſmall-pox inoculation, and an equal number in the natural way, but without effect.

Mr. RING ſtated, that he conſidered Dr. JENNER as the author of vaccine inoculation; and the diſcovery itſelf as being beyond compariſon, the moſt valuable and important ever made by man. He had inoculated more than twelve hundred perſons with vaccine matter, and had reaſon to believe that at leaſt a thouſand of them had been, either voluntarily or involuntarily, expoſed to the infection of the ſmall-pox, which they all reſiſted. He believes it to be *a perfect* and *a lasting* ſecurity againſt the ſmall-pox, and that it is attended with no danger, except from ignorance or neglect.

THE ROYAL JENNERIAN SOCIETY in giving an account of the riſe of that inſtitution ſay, "It commenced in January 1803, in conſequence of a requiſition, ſigned by His Royal Highneſs the Duke of Clarence, ſeveral of the Nobility, the Lord Mayor, and many other active and benevolent individuals of rank and reſpectability, who convened a meeting at the London Tavern, where an unanimous ſentiment prevailed as to the importance of the object: the eſtabliſhment of this uſeful inſtitution was reſolved upon; a ſubſcription was entered into, and an addreſs to the public adopted.

"It has been thought proper to notice theſe circumſtances reſpecting the origin of the ſociety, as meriting the particular attention of the chief magiſtrates, and principal inhabitants of the ſeveral cities and towns of the United Kingdom, with the earneſt hope of inducing them to adopt ſimilar meaſures within the ſphere of their influence; as by ſuch extenſive co-operation alone will it be poſſible to attain that great and deſirable object, the *extermination* of the *small-pox*."

This ſociety has the KING and the QUEEN for its Patron and Patroneſs. The other branches of the Royal Family are Vice-

patrons

patrons and Patroneſſes. The ſub-patroneſſes, are the Ducheſſes of Devonſhire, Marlborough, Rutland, and Northumberland; the Marchioneſſes of Bath, Hertford, Bute, Sligo, and many others; Ladies of the firſt nobility of the land.

The Vice-preſidents are the Archbiſhop of Canterbury, Biſhops of London and of Durham; Lord Chancellor, Dukes of Somerſet, Devonſhire, and Northumberland; Marquiſes of Worceſter, and Hertford; Earls of Berkeley, Egremont, Shrewſbury, Derby, Weſtmorland, Harcourt, Hardwicke, Liverpool, Darnley, Limerick, Earls Spencer, St. Vincent, and Moira, Lords Melvelle, Caſtlereagh, Pelham, Somerville, Rous, Carrington, Gwydir, Auckland, Hobart, and Gardner, Rt. Hon. C. Abbot, Speaker of the Houſe of Commons, Rt. Hon. C. Price, Lord Mayor, Rt. Hon. Henry Addington, Chancellor of the Exchequer. Rt. Hon. W. Pitt, Hon. Adml. Berkeley, Hon. C. J. Fox, Hon. C. Grey, Sir Henry Mildmay, Bart. Sir F. Baring, Bart. Sir J. W. Anderſon, Bart. Sir W. Curtis, Bart. Henry C. Combe, W. S. Poyntz, R. B. Sheridan, W. Smith, H. Thornton, G. Tierney, B. Travers, S. Whitbread, and W. Wilberforce, members of parliament, E. Jenner, M. D. J. G. Angerſtein, Eſq. T. Bernard, Eſq. T. Bonar, Eſq. The Board of Directors, in addition to the patrons, preſidents, and vice-preſidents, conſiſts of forty-eight governors who are not of the medical profeſſion. The medical council, of which Dr. JENNER is preſident, and Dr. LETTSOM vice-preſident, is compoſed of twenty-ſix phyſicians, and twenty-two ſurgeons. The ſociety has a ſtation called the central-houſe, in which Dr. Walker is reſident inoculator; and fourteen other ſtations in various parts of London, Weſtminſter, and the Borough, for inoculating gratis, twice a week, every one who applies. Theſe ſtations are attended by two phyſicians and two ſurgeons. Near four thouſand pounds were ſoon ſubſcribed for effecting the noble purpoſes of this inſtitution.

In their addreſs the ſociety ſay, "The ſubject for which we now claim the public attention is a diſcovery of no common importance, which greatly involves the ſafety and happineſs of mankind, and comes home to the feelings of every family, and of every boſom: a diſcovery which, in its conſequences, will not be of partial or local operation, but is equally intereſting to every

every rank, claſs and ſtation in ſociety: nor are its benefits confined to a ſingle country, or a ſingle age; they extend to the whole world, and to the remoteſt poſterity.

To mitigate the ſeverity of the ſmall-pox, the practice of inoculation was introduced into England about eighty years ago, and has ſpread at different periods, (though ſlowly and partially) into the moſt civilized parts of Europe. Many were the difficulties it had to encounter from prejudice, ignorance and timidity, and from the unſkilfulneſs of its earlieſt promoters; but experience has ſo fully eſtabliſhed its character, that the eminent ſuperiority of the inoculated over the natural ſmall-pox has long ceaſed to be called in queſtion."

"However, the friends of ſmall-pox inoculation have had to lament imperfections which no art could obviate, and to deplore an evil of no inconſiderable magnitude, which has attended its partial adoption. Though its mildneſs, compared with the natural diſeaſe, has been ſuch as to reduce the number of fatal caſes, from one out of ſix infected perſons, (the average proportion of death by the natural ſmall-pox) to about one in three hundred; ſtill this degree of riſk muſt give alarm to the anxious parent, when the life of a beloved child is at ſtake; nor has inoculation in all caſes been able to prevent the unſightly ſcars and deformities, and the ſubſequent injury to general health, which are the lamentable conſequences of a ſevere form of this diſeaſe. But the poſitive evil produced by the partial adoption of ſmall-pox inoculation has been a more extenſive propagation of the diſorder in a natural way; for though this contagion might perhaps have been exterminated by a vigorous ſyſtem of univerſal inoculation carried on at the ſame time in every part of the kingdom, yet as this plan was never purſued, the neceſſary conſequence has been, that whilſt individuals have been receiving the infection by the mild method of inoculation, they have been uniformly ſpreading it abroad under the terrible form of general contagion. Before inoculation was introduced, many remote and little frequented ſituations might be found, where the inhabitants had eſcaped the ſmall-pox during the courſe of a long life: but ſince this practice has been extended widely, and without precaution (the intercourſe between diſtant parts of the kingdom having

having at the ſame time become frequent) ſcarcely a village or hamlet in the moſt retired corner of the iſland can be pointed out, which has not been repeatedly viſited by this contagion. Inoculation, therefore, has been ſaving with one hand, and deſtroying with the other; and authentic documents prove an actual increaſe of late years in the mortality of ſmall-pox, of about ſeventeen in every thouſand. On a fair unexaggerated ſtatement, three thouſand lives in London and its immediate vicinity, and forty thouſand in the United Kingdom, are annually the direct victims of the ſmall-pox; beſides a great mortality occaſioned by diſorders conſequent upon this diſeaſe. Other countries ſuffer ſtill more from this calamity than our own; and it is important to remark, that this ſacrifice of life occurs for the moſt part at an early period; to thoſe who might otherwiſe have become uſeful and valuable members of ſociety.

"All the diſadvantages under which the inoculation of ſmall-pox has hitherto laboured; all the riſk to life and general health which has attended its uſe; and all the hazard of ſpreading a moſt dangerous contagion, are now however completely removed by the invaluable diſcovery of our countryman, Dr. JENNER.

"The following are the peculiar advantages of the new inoculation: It is never contagious by effluvia, or by any other known mode of infection; except by actual contact or inſertion of matter: and this ſingle circumſtance gives it the moſt decided ſuperiority over the common inoculation; ſince it obviates the moſt important objection urged againſt this practice, on the ground of its ſpreading a dangerous and highly contagious diſeaſe. Even in other reſpects it is preferable to ſmall-pox inoculation; for while it gives as perfect a ſecurity from all future contagion, it affords this invaluable benefit on much eaſier terms. The inoculated ſmall-pox, though mild in moſt inſtances, is ſometimes ſevere, and occaſionally fatal: the inoculated cow-pox, on the contrary, is almoſt invariably mild, requires no confinement, and ſeldom any medical treatment, produces no eruption beyond the part inoculated, leaves no injury to the general health, and, if we may form any concluſion from the extenſive experience of Dr. JENNER and other medical practitioners, will, when properly conducted, never endanger life.

" To conduct with safety and propriety this inoculation, simple as it is, an accurate knowledge of its genuine appearance, and of the spurious varieties which sometimes intrude, is indispensably necessary: its simplicity has introduced some degree of carelessness in attending to its real character; some precautions, not at first noticed, are now found to be requisite: for, as the success of all medical practice has experience for its basis, it would have been wonderful indeed, and next to miraculous, if every circumstance relating to the new inoculation had been at once suggested to the minds of its earliest promoters by intuitive perception.

" So rapidly is the new inoculation spreading throughout the kingdom, and so ardently is it now patronised by private and public favour, that we cannot but entertain the hope, that the inhabitants of this country will now eagerly unite in the great undertaking of extending it over every part of the British Empire. The time is arrived when all that was requisite for experiment has been more than amply fulfilled, and a farther delay in the general adoption of this beneficial practice, is only to allow needlessly of the loss of those thousands of lives that yearly fall a sacrifice to the small-pox. So completely is the extermination of this destructive disease within our controul, that could inoculation begin at the same time over every part of the kingdom, a single year, a single month, almost a single week, would annihilate a pestilence which twelve centuries have been establishing.

" To promote this laudable work by the high example of exalted patronage, by the advice and assistance of public bodies long accustomed to lead and direct general opinion, by the active exertions of men habitually employed in carrying into execution the noblest and most extensive undertaking, by the united skill and advice of the medical profession in every part of the kingdom, and by every other method of encouragement and persuasion, is the object of our society: nor have we any fear of being accused of presumption in undertaking more than we can hope to accomplish, when His MAJESTY has been pleased to give the Society his express sanction, by condescending to become its Patron; and we can boast of the highest additional support and assistance which the empire can bestow."

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THE MONTHLY REVIEWERS ſay, (vol. 38, page 316) "Fortunately for the public, this great problem is now ſettled in favour of Dr. JENNER's diſcovery; the doubts which have ariſen, from the uſe of improper matter in ſome caſes, and which we at one time could not help expreſſing, are now completely removed; and the practice is only better underſtood, and more firmly eſtabliſhed, in conſequence of the deciſion. Seldom, indeed, has a medical queſtion of importance been ſo ſpeedily determined: to this deciſion, the modeſty and candour of Dr. JENNER have eminently contributed; and in theſe reſpects we may propoſe him as a model to all who may have occaſion to engage in medical controverſy."

THE CRITICAL REVIEWERS ſay, (vol. 36, page 103) "We raiſed various objections to the attempt when firſt publiſhed, and have accumulated doubts and difficulties to promote a more accurate inveſtigation. In ſhort, by this conduct, we have proved ourſelves the beſt friends of the cauſe, and have given it a ſolid foundation, which the ſanguine expectations of its more eager favourers would not allow them to eſtabliſh firmly."

The opinion of many of the firſt medical men in the kingdom may be ſeen from the public honour they have given to Dr. JENNER, and the public atteſtation they have given of their perſuaſion of the ſafety and efficacy of the vaccine inoculation.

SUFFOLK.—"We the underſigned members of the Suffolk Society of Surgeons, having had ample opportunity of experiencing the ſafety and efficacy of the vaccine inoculation in preventing ſmall pox, introduced and now happily brought into general uſe, by your diſcovery, founded upon accurate and patiently conducted experiments, think it our duty to congratulate you, and to return you our grateful thanks for the invaluable advantages that the community at large have derived from your labours: which in the courſe of a few years, promiſe entirely to eradicate the dangerous and loathſome diſeaſe of the ſmall-pox." Signed by the Preſident.

ESSEX.—At the annual diſtrict meeting of the Benevolent Medical Society of Eſſex and Herts, May 3, 1802.

"The underſigned being ſtrongly impreſſed with the invaluable advantages that the public have derived from the introduction

of the vaccine diſeaſe by Dr. JENNER, as a ſubſtitute for the ſmall-pox, are deſirous of preſenting their thanks to him for the liberality and indefatigable induſtry with which he has made it public."

Mr. Ring ſays "The ſame ardent zeal for the propagation and improvements of ſcience which induced the learned editors of the Medical Journal to comply ſo readily with Mr. Dunning's requeſt, will I truſt alſo induce them to forgive the freedom I take in copying the atteſtation of the phyſicians and ſurgeons at Plymouth, in favour of the new practice." For the ſame reaſons I truſt Mr. Ring will forgive the freedom I have taken in the extracts I have made from his works.

PLYMOUTH and PLYMOUTH-DOCK, Jan. 7, 1801.—"The introduction of the vaccine inoculation in the populous towns of Plymouth and Plymouth-Dock, at a very early period after the commencement of the practice in this country, and the continuance of it on an extenſive ſcale to the preſent time, have afforded ſufficient opportunities to a numerous body of practitioners to confirm by their own obſervations, and by the teſtimony of their immediate friends, the ample and reſpectable evidence which has been adduced in favour of this eminently uſeful diſcovery. The general ſucceſs of the new inoculation has not however prevented the circulation of reports of unfavourable accidents and of occurrences inconſiſtent with its character of abſolute ſafety in itſelf, and of affording permanent ſecurity againſt the future invaſion of the ſmall-pox. As the prevalency of ſuch reports muſt have a tendency to excite doubts of the ſafety and efficacy of the new inoculation on the minds of thoſe who have not the opportunity of tracing them to their origin, and who are not acquainted with the ſtrength and ſolidity of the maſs of evidence on which the ſupporters of the new practice ground their conviction of its utility, we have thought that it might not be unattended with advantage to the public, at leaſt to that ſmall part of it to which our names and characters are known, to add to the numerous atteſtations already given, a declaration as well of our conviction of the efficacy and ſecurity of the practice of inoculating the cow-pox in general, as of our full perſuaſion, reſulting from enquiry into the

the circumſtances of the caſes adduced, that no inſtance has occurred in this neighbourhood, which is entitled in any degree to call in queſtion the reaſonableneſs of this conviction; the reports which have ariſen being evidently founded in error and miſrepreſentation. The effects of miſrepreſentation can be obviated only as they ariſe: but it may not be amiſs to obſerve here more particularly, that the ſmall-pox has lately prevailed in this neighbourhood to a conſiderable degree; and that in all the inſtances in which this diſeaſe is ſaid to have occurred after inoculation for the cow pox, the infection of the former was evidently received before the inoculation for the latter; or the operation had failed of producing thoſe ſymptoms of conſtitutional affection, on which alone ſecurity depends. The ſources of error will we truſt be in future avoided, by due attention to thoſe cautions in the practice which have been ſo fully pointed out by Dr. JENNER and others." Signed by five phyſicians, and twenty ſix other medical gentlemen, whoſe names are recited in the publication alluded to, but which for the ſake of brevity I omit.

MANCHESTER.—Dr. Thomas Percival, phyſician extraordinary, three other phyſicians, and ſeven other medical gentlemen of the Mancheſter Infirmary, Diſpenſary, Lunatic Hoſpital and Aſylum, agreed to recommend to the poor the inoculation for the cow pox, by publiſhing the following addreſs:—

" The experience of ſeveral years has fully proved, that inoculation for the cow-pox is a certain preſervative againſt the ſmall-pox; and is beſides ſo mild and ſafe a diſorder when compared with the inoculated ſmall-pox, that it has been generally introduced among the better informed, and more wealthy inhabitants, both of this kingdom and of various parts of Europe. In order, therefore, to impreſs ſtrongly on the minds of the poor the uſefulneſs and ſuperior advantages of this new plan of inoculation, the medical gentlemen, whoſe ſignatures are annexed, belonging to theſe charities, have thought it their duty to ſtate in this public manner, the following obſervations, for the ſerious peruſal of all thoſe poor perſons who feel *a proper affection for their offspring*, and who are deſirous of promoting their own intereſt and comfort.

1. Inoculation for the cow-pox has been practiſed for ſeveral years, with conſtant ſucceſs, in various parts of the kingdom.

2. It

2. It has never failed to prevent the infection of the natural ſmall-pox.

3. It may be communicated with ſafety to perſons of every age and ſex, and at all times and ſeaſons of the year with equal advantage.

4. The cow-pox is much preferable to the inoculated ſmall-pox, as being a milder and ſafer diſeaſe, and not capable of infecting the perſons living in the ſame family, or even ſleeping in the ſame bed.

5. It does not produce eruptions which ſcar and disfigure the face, and is ſeldom if ever attended with any other marks of the diſeaſe, than what appear on the arms from inoculation.

6. Neither ſwelling, blindneſs, lameneſs, nor any other complaints which are known frequently to be the conſequences of the natural ſmall-pox, and ſometimes, though but ſeldom, of the inoculated ſmall-pox, have been obſerved to follow the cow-pox.

7. Alarming fits frequently ſeize children, when ſickening of the ſmall-pox; and while cutting their teeth, this diſorder often proves dangerous; but no ſuch objections lie againſt the cow-pox.

8. So far from proving hurtful, delicate and ſickly children are often improved in health, by having paſſed through this complaint.

9. Scarcely any remedy or attendance are required for the cow-pox.

10. There is no neceſſity for a courſe of phyſic, either before or after inoculation.

11. The time of the parents will not be taken up in attendance upon the ſick, to the injury of the ſupport of the reſt of the family: and to poor families this is an object of no ſmall importance.

The prejudices of the poor againſt inoculation for the ſmall-pox, by which thouſands of lives have been annually ſaved, have been often lamented: but if they ſuffer unjuſt prejudices to prevent their laying hold of the advantages now offered them, by the inoculation of the cow-pox, they will neglect a duty they owe to themſelves, to their families, and to ſociety at large.—For ſurely it is little leſs than criminal, to expoſe their helpleſs children

children to the attack of ſo terrible and fatal a malady as the ſmall-pox; when it may be readily avoided by the inoculation of ſo mild, ſimple and ſafe a diſeaſe as that of the cow-pox.

N. B. All poor perſons, whoſe affection for their families leads them to embrace this favourable opportunity, may have their children inoculated for the cow-pox, at the Diſpenſary, from twelve to one in the afternoon, every day in the week, Sunday excepted, throughout the year."

I think I hear the poor of the borough of Portſmouth ſay, 'I wiſh I lived at Manchester, or that there was ſuch a Diſpenſary in this borough.'

This addreſs has been circulated in London by the Society for bettering the condition of the poor; who remark, that notwithſtanding the advantage of inoculation for the ſmall-pox, it is a melancholy fact that the poor ſtill ſuffer greatly by this diſorder.

BRADFORD.—The following is a teſtimonial of four medical gentlemen of Bradford.

"The practice of vaccine inoculation, though of recent origin, has already forced itſelf upon the notice of the firſt profeſſional characters in this and the neighbouring kingdoms. The advantages are too numerous to be detailed here; but it may be proper to obſerve, that the vaccine diſeaſe requires no preparation, medicine, no change of diet, no confinement, and is ſeldom attended with much indiſpoſition.

We admit that comparatively few have periſhed by ſmall-pox inoculation, but it is conſiſtent with our experience, that numbers have been ſo dangerouſly ill as to excite ſerious alarms for the iſſue of the complaint. Under the circumſtances of the vaccine inoculation no ſymptom of danger has ever been exhibited. The ſmall-pox is a diſeaſe of contagion. The cow-pox cannot be communicated but by actual contact or incision, which circumſtance enables the inoculator to ſingle out any individual for the operation without ſubjecting any other member of the family to the ſmalleſt riſk. That the cow-pox is a ſubſtitute for the ſmall-pox is now ſufficiently certain. The experiments which have been inſtituted, to put the queſtion beyond all doubt, are *numerous, conclusive, and satisfactory*.

Impreſſed

Impreſſed with a conviction of the truth of thoſe facts, and animated by no other motive than a ſenſe of duty, and a ſincere deſire to reſcue the lower orders of ſociety from the ravages of contagion, which to them is ſo peculiarly diſtreſſing and fatal, the underſigned ſurgeons are deſirous to introduce a diſeaſe infinitely more mild and very certainly ſafe: they are therefore ſolicitous to recommend to the inhabitants of Bradford and its vicinity, the practice of vaccine inoculation; and they hereby inform the public that they will attend at their own houſes every Tueſday and Friday morning, to inoculate gratis the the children of the poor; and Dr. MOSSMAN, ſhould any indiſpoſition occur, or other circumſtances requiring extraordinary attention, will give his joint aſſiſtance in carrying every perſon ſo inoculated through the diſeaſe.

GEORGE MOSSMAN, M. D,
THOMAS JONES,
WILLIAM MAUD,
THOMAS LISTER,
} Surgeons."

YORK.—The Medical Journal for Nov. 1800, contains the reſolutions of the Directors of the York Diſpenſary, together with two letters which had been publiſhed in the York Herald, by Dr. Cappe, previous to the meeting at the Diſpenſary. "Theſe (ſays Dr. Cappe) will ſhew, that we are not totally negligent of the welfare of our fellow citizens, though ſo far remote from the centre of animation. The ſubſtance of theſe reſolutions is, that it appears from many of the moſt experienced medical men, that a general inoculation for the cow-pox, throughout the united kingdom of Great Britain and Ireland, would tend to effect the extinction of the caſual ſmall-pox; and conſequently be the means of annually ſaving upwards of 45,000 lives.

That the phyſicians and ſurgeons belonging to the Diſpenſary be requeſted to form themſelves into a ſociety for the purpoſe of inoculating all ſuch perſons as may preſent themſelves for inoculation with the cow-pox; and invite into their body ſuch phyſicians, ſurgeons and apothecaries, reſident in York, as in their opinion may be likely to promote the object of that ſociety. That the phyſicians and ſurgeons of the Diſpenſary

be

be desired to supply the country practitioners with matter when requested. That the directors shall use their utmost endeavours to encourage inoculation for the cow-pox in all the neighbouring villages. That the resolutions and regulation of this meeting be sent to all the clergymen in York, and the neighbouring villages; with a request of the meeting that they will communicate the same to their parishioners; pointing out the advantages attending the inoculation for the cow-pox, in any way that they judge most likely to forward the views of this meeting. That the medical gentlemen of the Dispensary be requested to draw up and print such rules for the use of the poor, as may be necessary to regulate their conduct and attendance at the Dispensary, during the period of inoculation of the cow-pox.

That books be opened at the York banks, where the smallest sums will be received in support of a plan that has for its object the extinction of the small-pox, *it being a fact supported on the best authority*, that those who have had the cow-pox are rendered incapable of receiving the infection of the small-pox.

Scotland.—In the Annals of Medicine for the year 1800, is a communication from Mr. Williamson of Anstruther, who had inoculated 150 children with the vaccine disease. Most of them have since been exposed on many different occasions to the infection of the small-pox, but without effect.

The Directors of the Edinburgh Dispensary have adopted a similar plan to that adopted by the city of York. Hence the learned editors observe, there is reason to hope that the new inoculation will soon be adopted by many of the lower class at least, if they can *prevail upon themselves*, not to neglect the means which providence has put in their power for preserving the lives of the offspring against the ravages of a most dreadful disease. "We are told," says Mr. Ring, "that among people of *higher rank* in Edinburgh, vaccine inoculation has made a rapid progress; owing to the example and admonition of medical practitioners. The poor it seems in Edinburgh, as well as in too many other places, are left *to prevail on themselves.*"

The editors of the Annals declare, that although many thousands in different parts of Scotland have now undergone the vaccine disease, they have not heard of a single well authen-

ticated inſtance, in which it proved fatal; and in by much the greater caſes, the affection has been ſo inconſiderable that it has conſiſted merely of a ſingle puſtule on the arm, with a very ſlight degree of fever laſting only a few hours.

That the vaccine diſeaſe affords complete protection againſt the natural ſmall-pox has been demonſtrated in the moſt convincing manner, on many different occaſions, at Edinburgh and its neighbourhood. Children who have had the cow-pox, have not only reſiſted repeated inoculations with ſmall-pox matter, but have alſo been frequently expoſed with impunity to the natural contagion of the ſmall-pox of the worſt kind. This appeared particularly evident in the village of Newhaven, where during the courſe of the laſt ſpring, the confluent ſmall-pox proved fatal to many. A conſiderable number of children at that place who had been inoculated for the cow-pox completely reſiſted the contagion of the ſmall-pox; although ſome of them lived under the ſame roof, and were daily at the bedſides of thoſe to whom the ſmall-pox proved fatal.

Glocester.—Two phyſicians and two ſurgeons of the Gloceſter Infirmary delivered to the governors of that inſtitution the following recommendations. "We the underſigned phyſicians and ſurgeons of this infirmary, deſirous of extending the advantages which promiſe to accrue from the vaccine inoculation to the poorer claſſes of ſociety, and fearing many evils may ariſe from its being practiſed upon them by perſons not of the faculty, and ignorant of its genuine appearances, recommend to the governors of the Infirmary, to permit a general inoculation of the cow-pox to be practiſed at the Hoſpital on ſuch proper objects as may apply there for that purpoſe; and to appoint every Thurſday and Monday, at eleven o'clock, for ſuch inoculation, and their ſubſequent attendance; at which time we will be prepared to give every neceſſary aſſiſtance gratuitouſly."

The Board of Governors in compliance ſay, "Being much gratified with the above recommendation which may be productive of eſſential benefits to the poorer claſſes of ſociety, hereby give notice, that all ſuch perſons as are deſirous of being inoculated for the cow-pox, and are objects of charity, will be permitted to attend at the Infirmary, on Thurſday and Monday at

at eleven o'clock in the forenoon in every week, at which time any gentleman of the faculty will be at liberty to inſpect the progreſs of the diſorder,

By order of the Board,

H. WILSON, Secretary.

The faculty in ſeveral other large towns have been induced to ſign a public teſtimonial of their approbation of the vaccine inoculation. In the Medical Journal for December 1800, the names of five phyſicians and ſeventeen ſurgeons are mentioned as having been ſigned to a public teſtimonial at Leeds. One at Durham, ſigned by one phyſician and ſeven ſurgeons. Another at Cheſter, ſigned by four phyſicians and twelve ſurgeons; whoſe names are all mentioned in that Journal. Meetings of the faculty have alſo been held at Hull, Birmingham, and ſeveral other places; and ſimilar reſolutions have been adopted.

FOREIGN TESTIMONIALS AND PRACTICE.

America.—Vaccination has been practiſed and recommended by Dr. Seaman and Dr. Mitchell of New-York. Dr. Waterhouse, the learned profeſſor of the theory and practice of phyſic in the Univerſity of Cambridge near Boſton in America, ſays, "Vaccination has had much to contend with here; but its enemies are leſſening daily. It will triumph in ſpite of its opponents. Preſident Jefferſon is the greateſt patron of it in America. Under his auſpices I have planted it in Virginia, Kentucky, Columbia, the City of Waſhington and Philadelphia. The Preſident ſpeaks of it to me as the moſt valuable diſcovery in the annals of medicine. He wrote me word a few months ago, that he had at that time upwards of twenty of his own family under the diſtemper. "The example of publiſhing teſtimonials in favour of vaccine inoculation, ſigned by ſuch medical men as approve of the practice, has been followed in ſeveral parts of America. In an addreſs recommending the vaccine inoculation, ſigned by eighteen practitioners, it is ſaid, "We

are moſt fully convinced of the efficacy of the cow-pox as affording a perfect ſecurity againſt the ſmall-pox; and that it alſo poſſeſſes the following advantages. It may be communicated with ſafety at all periods of life, from infancy to old age; and with equal ſucceſs at all periods of the year, in different ſtates of health, and during pregnancy. Fourteen medical gentlemen at Shrewſbury and its neighbourhood, have, from their own experience certified their entire conviction of the ſucceſs of the new practice; as an abſolute ſecurity againſt the ſmall-pox.

Dr. Stringham of New-York ſays, "Whilſt other countries are engaged in deriving every benefit from this new diſcovery, we trans-atlantics are by no means inſenſible to its importance. I think it totally unneceſſary to ſubjoin any proofs as to the ſecurity afforded by the cow-pox againſt the ſmall-pox. This is already eſtabliſhed by *a cloud of witneſſes*. It muſt therefore be pleaſing to every friend of humanity to learn, that the phyſicians here are not behind the reſt of their medical brethren in other parts of the world, in endeavouring to alleviate the preſſure of human miſery."

West-Indies.—Dr. John Rook of Montpelier in Jamaica, in a letter to the Hon. Francis R. Brodbelt of Spaniſh Town, ſays, "Since I had the honour to write to you, I have inoculated with vaccine matter upwards of twelve hundred patients of both ſexes, and of all ages and colours, with that uniform ſucceſs which has accompanied the diſeaſe in Britain. I have likewiſe extended it to the medical practitioners in the adjacent pariſhes. At this time not leſs than four thouſand have undergone the diſeaſe in St. James's Hanover, and Trelawny. It is alſo becoming general in Weſtmorland. No loſs has been ſuſtained, and comparatively ſpeaking, no labour loſt. I have not in a ſingle inſtance found it requiſite to adminiſter any medicine. So that I think we may ſafely conclude that the value of vaccine inoculation is not at all diminiſhed by a change of climate."

Newfoundland.—The following is an extract of a letter from the Rev. John Clench, of Trinity in Newfoundland, to the Rev. G. C. Jenner. "After inoculating my own family, I availed myſelf of the opportunity, whilſt the ſmall-pox was making its ravages at St. John's, of viſiting that place. Encouraged by

your

your repreſentation, and in order to eſtabliſh the fact of the cow-pox being an abſolute preventive of ſmall-pox, I put my nephew, Joſeph Hart, to the teſt, by inoculating with ſmall-pox matter, and by expoſing him to a contagious atmoſphere; but without its producing in either inſtance, the ſmalleſt effect on the ſyſtem. This ſingle caſe excited the aſtoniſhment of every perſon within whoſe knowledge it came; and moſt of thoſe who had not previouſly gone through the ſmall-pox were eager to ſhield themſelves againſt that dreadful malady by adopting the vaccine inoculation. Juſt before my arrival at St. John's, a woman was inoculated for the ſmall-pox, and four days afterwards her infant at the breaſt with vaccine. Both went through the reſpective diſeaſes in the uſual way, and perfectly diſtinct from each other; although the mother continued to ſuckle her child the whole of the time. Shortly after my return to this place, the ſmall-pox was brought here in a veſſel from Quebec; one of her crew died of it. Fortunately for the inhabitants of Trinity, moſt of them had been inoculated with the cow-pox, and were thereby prepared to reſiſt the influence of the ſmall-pox. Several of my patients attended him during his illneſs, but reſiſted the infection of the ſmall-pox."

FRANCE has emulated the noble example ſet by England. A committee of medical practitioners has been formed at Paris for the encouragement of vaccination. From the experience they have had, the committee draw the following concluſions. "The cow-pox appears to be an infection of the mildeſt nature, ſcarcely deſerving the name of *a diſease*. In the hundred and fifty ſubjects inoculated with vaccine matter, not the leaſt accident occurred. It is equally practicable and ſafe at all ages. The committee have inoculated infants at the breaſt, and perſons forty and fifty years of age, with equal ſucceſs. They are likewiſe of opinion that it is a preſervative from the ſmall-pox, which is remarkably evident from the re-inoculations performed with ſmall-pox matter."

Some time ſince the firſt formation of this committee, we are informed by the Moniteur, that they have ſeen their labours crowned with all the ſucceſs they could deſire in ſo ſhort a time. The cow-pox has ſpread with great rapidity through all ranks of ſociety, and through thoſe departments where the ſmall-pox has

has committed the moſt dreadful ravages for ſome years. We have the authority of Dr. Colon for aſſerting, that the number of thoſe who have been inoculated for the cow-pox now amounts to ſeveral thouſands; and that a great part of the medical practitioners in the different provinces have haſtened to cauſe their fellow citizens to enjoy the benefit of this practice. "*The ſucceſs of the new method of inoculation,*" they affirm, "*is now undeniably proved.*"

Honourable mention is made of the names of ſeveral magiſtrates in France, who have diſtinguiſhed themſelves by their zeal in promoting this beneficial practice.

The Pariſian preſs now teems with luminous diſſertations on the ſubject. One by Dr. Huſſon, and another by Dr. Ranque, both members of the Medical Society of Paris. One has lately been publiſhed by Dr. Moreau, member of ſeveral learned ſocieties. They concur in proving from a great number of evidences, that the cow-pox is a mild and ſafe diſeaſe, and a moſt certain preventive of the ſmall-pox. The laſt mentioned author gives a detail of the proceedings at Paris, and of the eſtabliſhment of vaccine inoculation at Reims; and has collected abundant evidence to prove, that the diſcovery of Dr. JENNER ameliorates the condition of man; and enſures to its author the eſteem and gratitude of poſterity.

This learned author informs us, that ſixteen thouſand perſons died of the ſmall-pox at Naples, in one year; and twenty-thouſand at Paris in another. What friend of the human race can contemplate the calamity of ſuch a peſtilence, and the utility of the cow-pox, without feeling a virtuous and noble determination to exert the influence he poſſeſſes to exterminate the ſmall-pox, by the encouragement of the Jennerian Diſcovery!

The Medical Society of emulation at Paris has nominated ſeveral medical men as a committee to inoculate the poor of Paris gratuitouſly.

Dr. Moreau ſtates, that the number of experiments which vaccine inoculation had undergone, amounted ſome months ago to upwards of two hundred thouſand, and that it is now incalculable.

The Miniſter of the Interior has conſulted the ſchool of medicine at Paris, in order to know whether it would be adviſeable for

for Government to diſtribute in the country the form of inſtruction, which the phyſicians of Geneva had addreſſed to the people by means of the clergy. This learned body whoſe deciſion was requeſted, anſwered in the affirmative. The Prefect of the department of the Seine has alſo declared himſelf a friend to the practice. This reſpectable magiſtrate, adds Dr. Moreau, has ſince founded an hoſpital for vaccine inoculation. The municipalities have followed the example of the Prefect; and at this moment, in all the different ſections, the committees of beneficence ſeek to communicate to all ranks of people this ſalutary practice.

"The conduct of many other magiſtrates of the French Republic," ſays Mr. Ring, "and that of different foreign governments, has alſo proved, that vaccine inoculation is a ſpecial object of ſolicitude to all thoſe, who are truly worthy of the auguſt function of ruling over mankind."

M. Tournier aſſerts, "that this ineſtimable diſcovery has ſurpaſſed all the hopes we dared conceive, and has excited a ſacred enthuſiaſm in almoſt every breaſt where ſenſibility reſides." By the teſtimony of this reſpectable author, it appears that the National Inſtitute of France, the School of Medicine at Paris, many learned ſocieties, and a conſiderable number of private practitioners, have examined with attention the experiments on vaccine inoculation; and that their reports confirm what the Engliſh had ſaid concerning its virtue. He informs us, (and his information is ſanctioned by Lucian Bonaparte, Miniſter of the Interior, and Prefect of the Department, who has diſplayed the moſt ardent zeal in promoting the object) that "all the learned ſocieties, medical bodies, and conſtituted authorities of the Republic, have impoſed on themſelves the duty of rendering the practice univerſal, by inoculating the people gratis;" and "thoſe who inoculate the cow-pock, have ſubmitted it to experiments, which prove more and more the innocency and efficacy of the proceſs."

Thus we perceive our Gallic neighbours, forgetting that this diſcovery was made by a native of a country with which they are unfortunately at war, have not only adopted this practice, but their learned ſocieties and public bodies of medical men, ſo far from deeming this ſubject foreign to the nature of their inſtitution;

inſtitutions; ſo far from waiting till the experience of private individuals has decided the queſtion; and ſo far from ſtanding unconcerned ſpectators, while ſuffering humanity claims their aſſiſtance and compaſſion; have voluntarily ſtepped forward and exerted themſelves in the glorious cauſe. Thus while the military characters, from petulance and ambition are deſoluting Europe, the medical and ſcientific men are endeavouring to ſnatch thouſands of their fellow citizens from the jaws of death. "It will be happy for other nations if other learned ſocieties have no reaſon to bluſh for not having ſet or followed ſuch an excellent example."

GERMANY has been bleſſed with the introduction of this wonderfully beneficial diſcovery. Dr. De Carro of Vienna, who has ſignalized himſelf as the Jenner of the continent, has publiſhed in French and German an elaborate hiſtory of this inoculation, dedicated to Lord Minto, as miniſter of the nation where the diſcovery took place. After informing Dr. JENNER of the ſucceſs of a clergyman at Brunnam Gebizg, who from his pulpit had exhorted his pariſhioners to avail themſelves of the advantage of one of the greateſt bleſſings ever beſtowed by providence on mankind; he obſerves, "that if the example of this benevolent divine was followed by the clergy in general, it would in ſome degree repair the waſtes and heal the wounds of this deſtructive war."

Dr. De Carro informs us, that a young nobleman particularly diſtinguiſhes himſelf by the encouragement which he gives to the inoculation at Brun, the capital of Moravia. He has offered two prizes for the two Moravian phyſicians, who ſhall inoculate the greateſt number in the courſe of the year. He has engaged intelligent phyſicians to aſſiſt in theſe inoculations.

The practice is not only ſpreading rapidly through Germany, but is alſo introduced, by Dr. De Carro, into the Venetian ſtate; where it is cultivated by Dr. Moreſchi with the greateſt ſucceſs; who has ſince publiſhed a work on the ineſtimable advantages of this method of inoculation. Mr. Ring ſays, "I am informed by the moſt reſpectable authority that the cow-pock inoculation is now practiſed with the greateſt ſucceſs, not only at Hanover, but alſo at Leipſic, Dreſden, and Berlin." Dr. Albers, phyſician at Bremen, ſays, "The inoculation of the cow-pox continues

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to be attended here with the greateſt advantages: nearly two thouſand have been inoculated in the courſe of the year, and not one of them has been infected with the ſmall-pox during the epidemic which has raged here during the whole ſummer. Of 300 which I inoculated, I have re-inoculated many with ſmall-pox matter, but without effect."

PRUSSIA.—In the Monthly Magazine for April 1801, it is ſaid, "The vaccine or Jennerian inoculation makes a more rapid progreſs upon the Continent of Europe, than even the moſt benevolent and ſanguine friends of humanity could have expected. One of our correſpondents at Paris ſtates, that its ſucceſs in that city, where it was introduced by Dr. Woodville, exceeds that in London. Another, writing from Franckfort on the Maine, ſpeaks of its ſucceſs in terms equally favourable. A third, from Berlin, deſcribes its general adoption: and the King of Pruſſia has ordered thoſe individuals of the Pruſſian army who have not had the ſmall-pox, to be inoculated with vaccine matter."

HOLLAND.—I am now favoured, ſays Mr. Ring, with the peruſal of a letter, received from Dr. Davids of Rotterdam, by Dr. JENNER. In his letter he informs him, that he has been ſo happy as to introduce the cow-pox through the whole country with the greateſt ſucceſs; and that the name of JENNER is adored. He ſays the cow-pox was introduced juſt at the moment when the ſmall-pox was making its ravages on every ſide; yet not one of them who had undergone the inoculation of the cow-pox, received infection. It is likewiſe eſtabliſhed at Amſterdam, and is practiſed at the Foundling Hoſpital, in that city. It is particularly worthy of being recorded, that the Government of the Hague has recommended it in a circular letter, not thinking any diſcovery which regards the health of the people, beneath their notice.

GENEVA.—A Memoir on the Inoculation of the Cow-pox has been written by Dr. Odier of Geneva. It was drawn up by order of the Miniſter of the Interior, of France. We are informed by Dr. Odier that this memoir was to be ſent to all the officers of health in the department. We are alſo told that the ſame experiments which were performed in England, and which ſo

fully demonſtrate the advantage of the ſmall-pox, have been repeated with the moſt complete ſucceſs at Vienna, Hanover, Gotha, and Holſtein.

Our author and his colleagues proved in two ways that the cow-pox is a ſure guarantee againſt the ſmall-pox. In the firſt place all their patients were unavoidably expoſed to variolous infection, in conſequence of a vaſt number of children labouring under the ſmall-pox in all parts of the city; yet not one of them had taken the diſeaſe, except thoſe who were previouſly infected. In the next place, ten or twelve of thoſe who had undergone vaccine inoculation, were inoculated with variolous matter, immediately transferred from arm to arm; and with all the precautions neceſſary to enſure ſucceſs; many weeks after the vaccine ſcabs had fallen off: yet neither of them betrayed the leaſt ſign of general infection. The inciſions were ſlightly inflamed, but they readily dried up; and there was not the leaſt appearance of an areola, nor the leaſt ſymptom of fever.

What we have beheld, and what we every day behold, leaves no room to doubt that vaccine inoculation is both a preſervative from the ſmall-pox, and a means by which the diſeaſe at length may be utterly deſtroyed. It is one of the fineſt and moſt important diſcoveries which has been made for a long time. May all governments unite in endeavours to ſpread it, to make it known, and to encourage it by all thoſe means which are compatible with liberty. It is, perhaps, the greateſt ſervice which can be rendered to humanity.

By a note ſubjoined to the ſecond edition of this memoir, we are informed, that about 600 perſons had at that time been inoculated with the cow-pox at Geneva; all of whom had the diſeaſe in the moſt favourable manner. Dr. Odier's memoir was diſtributed gratis; and his arguments derived additional weight from the devaſtation of the ſmall-pox raging all around.

The clergy of Geneva, with a ſpirit of philanthropy which reflects on them great honour, have very willingly undertaken the charge of diſtributing the following advice, ſigned by eight phyſicians and three ſurgeons, by giving it to the parents of all the children who are preſented to them in baptiſm:—

"The infant whom ye preſent is expoſed to very great danger,

ger, that of catching the ſmall-pox; a diſeaſe which was brought into Europe in the eighth century, and has ſpread in ſuch a manner, that it cannot be expelled. It is morally impoſſible that infants can be preſerved from it in any other way but by inoculation.

"Happily, and by the great bleſſing of providence, a ſpecies of inoculation has been for ſome time diſcovered, which many thouſands of experiments have proved to be equally ſafe and efficacious; and which may without any inconvenience be put in practice, at all ſeaſons, and even on children of the moſt tender age, and of the moſt weak and delicate conſtitutions: it is ſcarce ever accompanied with, or followed by, any unfavourable ſymptom; and if ſuch occurs, which is very rare, it is never of much importance. What it produces is called the vaccine diſeaſe: it is always extremely mild, and almoſt always regular. It has another advantage of great value, which is, that it is never contagious; ſo that by inoculating one perſon with it, we run no riſk of giving it to his neighbours: and in the mean while we may reſt aſſured that thoſe infants to whom we have communicated by way of inoculation, are thereby for ever ſecured from all danger of catching the ſmall-pox.

"If then you would preſerve your infant, we exhort you immediately to have it inoculated.—Haſte to preſerve him in this manner from a dreadful diſeaſe, which daily commits ſuch cruel ravages around you; and which may ſeize him in a moment when you leaſt expect it. Put it not out to nurſe till you have inſured him from this danger.

"There are phyſicians and ſurgeons, inſtructed by great ſtudy and experience, and who have no intereſt in deceiving you, who will give you their advice. They alſo are fathers; and they have inoculated their own children, without heſitation, and with the happieſt ſucceſs. In the name of humanity, and by all that you hold moſt dear, follow their example; or elſe dread that a day will come when you ſhall bitterly lament over the death of your child, for having rejected the ſalutary means which we now propoſe. They are ſo ſimple, and ſo eaſy, that if you refuſe them, or delay having recourſe to them, you have no excuſe."

The Moniteur of the 13th *Brumaire* and the ninth year of the French Republic, bears witneſs of the ſucceſs of the new

practice at Geneva; declaring that the small-pox had, in a short space of time, swept away 250 children in that city; and that 600 persons, inoculated with the cow-pox, were all preserved from that disorder, except seven or eight who had received previous infection.

By a letter from Dr. Aubort, we learn, that all Geneva is vaccinated; and that the inhabitants of the country villages, furnish the only means of preserving the sacred flame.

At Brussels, many of the professors and other eminent medical men have testified their respect for the new practice, by inoculating their own children with the cow-pock; and the event has justified their determination. M. Fournier, first surgeon of the military hospitals in that city, and member of several learned societies, has published an historical and practical essay on vaccine inoculation. He has inoculated above two hundred persons, of every age; and the success he met with in those cases has dispelled every doubt on the subject. He affirms that inoculation of the small-pox, which was hitherto a wise and a commendable precaution, ought now to be considered as a *serious evil*.

Spain.—Dr. Careno of Vienna, who has published a treatise on the cow-pox, mentions that he has received intelligence that vaccine inoculation has made a regular progress in Italy, particularly at Milan, Florence, Naples, and Rome. It is said that Spain also rivals other nations, in putting this salutary process to the proof. 'His Catholic Majesty having seen Dr. Careno's translation of Dr. Jenner's works, in August 1800, ordered his prime minister to inform him, that his Majesty intended to introduce vaccine inoculation into his dominions; and Dr. Salva wrote him word from Barcelona, that vaccine inoculation was then in vogue at that place.' Dr. Colon informs us that it is now practised in Spain by order of government. Brigadier Smith, an officer in the service of his Catholic Majesty, has propagated vaccination in Spain with the most ardent zeal; and there is a general demand for matter in most parts of the kingdom.'

Italy.—"Upwards of 70,000 have been vaccinated in the Italian Republic, by Dr. Sacco and his fellow labourers. This was in consequence of the effectual measures pursued. By order of government, a proclamation had been read by the clergy, to adopt

adopt this ſalutary proceſs; and at Milan, the capital of the republic, vaccine inoculation was practiſed in every pariſh, and in every church."

Russia.—Mr. Ring ſays, "It is well known, that the King of Pruſſia, (the firſt crowned head who ſubmitted his children to vaccination) and the Emperor of Germany, who followed his example, have conſiderably promoted the practice; but the Empreſs Dowager of Ruſſia has diſtinguiſhed herſelf above all others in this great cauſe of humanity."

"In October, 1801, when the court was at Moſcow, on account of the Coronation of the preſent Emperor, Mr. Lindſtrohm, ſurgeon to his Imperial Majeſty, ſucceſsfully inoculated a child with vaccine matter received on a thread from Dr. Trieſe of Breſlaw. The Empreſs Dowager, who zealouſly patroniſes this beneficial practice, conferred on the child the name of Vaccinoff, in addition to her original name; cauſed her to be conveyed in one of her own coaches to Peterſburgh, to be placed in the Foundling Hoſpital, as a ſource of future inoculations; and ſettled on her a proviſion for life."

She has alſo ſent a valuable diamond ring to Dr. Jenner, by the hands of Lord St. Helens; another to Dr. Trieſe; and a letter to Dr. Jenner, written by her own hand; of which the following is a tranſlation.

"Sir, The practice of vaccine inoculation in England having been attended with the happieſt ſucceſs, which is well atteſted, I have eagerly imitated that example, by introducing it into the charitable eſtabliſhments under my direction. My endeavours having perfectly anſwered my expectations, I feel a pleaſure in reporting their ſucceſs; and in teſtifying my acknowledgements to him, who has rendered ſuch a ſignal ſervice to humanity. This motive induces me to offer you, Sir, the ring ſent herewith, as a teſtimony of the ſentiments of eſteem and regard, with which I am,

Yours affectionately,

Palowsky, August 10, 1802. MARY."

By a letter from Dr. Trieſe, it appears that vaccine inoculation is now eſtabliſhed throughout the Ruſſian dominions. This is owing to the diſtinguiſhed patronage and protection it has received. Vaccine virus, which Mr. Harder ſerjeant-major of

Revel

Revel, received from Mr. Ring, proved ſucceſsful; and it appears by a letter received from him by Dr. JENNER, that from this ſource the nobles who poſſeſs eſtates in the neighbourhood had inoculated many thouſands of peaſants with their own hands."

The new inoculation is making conſiderable progreſs in TURKEY, having been zealouſly patroniſed by his Majeſty's Ambaſſador, Lord Elgin, and practiſed by ſeveral phyſicians; and likewiſe at Solonica, in Macedonia; where Dr. Font has himſelf vaccinated more than eleven hundred perſons. Drs. Moir and Scott, have happily ſucceeded in the practice of vaccination in the EAST INDIES. Under the ſanction of the Preſidency, meaſures have been taken to diffuſe its benefits throughout all the Britiſh ſettlements.

It has been extenſively and ſucceſsfully practiſed at Minorca, Malta, and various other places in the Mediterranean. It has alſo been introduced into Portugal by Dr. Dohmeger, who has publiſhed a treatiſe on the ſubject; in which he ſays, "Her Excellency the Ducheſs of Cadoval has claims to eternal gratitude, for having been the firſt who, like an enlightened mother, ſpurned the prejudices of the vulgar againſt inoculation; thereby ſecuring to her children life, health and beauty. What difference is there between aſſaſſinating a child, and abandoning it to the mercy of the deſtructive peſtilence? Is it poſſible there can be a mother that could bear to hear the voice of her child, whoſe death has been occaſioned by the ſmall-pox) crying to her from the grave, 'O inſenſible and inhuman mother! why have I been thus ſacrificed? what excuſe can you offer for having ſtifled the voice of reaſon, which pointed out the moſt ſafe and effectual means of ſaving my life? Why have you lent an ear to prejudices, to which I have fallen a victim? O barbarous and cruel woman; unworthy the name of a mother! Would to God thy remorſe may be laſting; that other mothers, when they contemplate thy miſery, may ſhew themſelves in future more ſolicitous for the ſafety of their offſpring."

Vaccination is practiſed in Switzerland and Sweden; and we are informed by the laſt reports from Denmark and Norway, that the number of perſons inoculated in thoſe countries for the cow-pox amounts to twenty thouſand.

The committee of vaccine inoculation at the Louvre, addreſſed

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to the Society of Medicine at Paris, by whom they were appointed, remark, that the multitude of proofs which have been communicated to them by their correſpondents, are powerful arguments in favour of vaccine inoculation. But they add, if we conſider that their number is no more than a trifling fraction when compared to thoſe received from Paris, London, Vienna, Geneva, and almoſt all *the principal cities in Europe*; if we alſo conſider that the ſame experiments, made by the moſt enlightened medical men of all countries, have been attended with the ſame ſucceſs, it is difficult to conceive that the moſt prejudiced man, if he be an honeſt man, will reſiſt the general impulſe, and not be convinced.

TESTIMONIALS AND PRACTICE OF INDIVIDUALS.

In the Medical Journal for December 1799, is a communication on this ſubject, from the Rev. Mr. Holt, rector of Finmere, near Birmingham; a gentleman whoſe character is highly eſtimable for benevolence, learning, and love of ſcience: in which he ſays, "I have inoculated upwards of three hundred. And as I adopted Dr. Woodville's excellent method of ſtating when and from whom each perſon was inoculated, I was enabled to trace varieties up to their ſource: but excepting four inſtances my caſes were all like each other, viz. pain in the armpit the ſeventh or eighth day; ſlight head-ache, ſometimes attended with feveriſh ſhiverings, which invariably yielded to a doſe of ſalts the day after: except in the caſe of Thomas Sheen, a baker, who was obliged to deſiſt from his uſual occupation for three days, in conſequence of the pain and inflammation of his arm; which poſſibly might be increaſed by the heat to which he was ſo much expoſed; as his is the only caſe in which the patient was prevented following his buſineſs as uſual. One doſe of ſalts taken in the morning after they complained of pain, was the only medicine which they had. My patients were of all ages, from ſeven weeks to ſixty years; nor did diſeaſed habits of body, or pregnancy, leſſen the mildneſs of the infection.

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One circumſtance occurred which perhaps is too trivial to be mentioned: I inoculated near thirty twice or thrice, apparently without effect, allowing an interval of five or ſix days; but though they ſickened from the laſt inciſion, a puſtule regularly appeared, wherever I had formerly inoculated them; as if the dormant matter had been rouſed by the activity of that laſt inſerted. At the expiration of ſix weeks, I inoculated ſix of my pariſhioners with variolous matter. On the third day I was not a little alarmed by a conſiderable degree of inflammation which appeared in all their arms, and which ſeemed to indicate the certainty of their having the ſmall-pox: but in two or three days the whole diſappeared without any puſtule being formed.

The Rev. Mr. FIELDING, rector of Haſlemere, in Surry, and a magiſtrate for that county, has not thought it any diſparagement of his rank, or of his ſacred function, to beſtow the bleſſings of this beneficial practice on his poor neighbours, and inoculate them with his own hands.

The ſame ſucceſs has attended the benevolent exertions of the Rev. Mr. JOSEPH BERRINGTON, who ſays, in a letter to Mr. Ring, that "the ſtate of vaccine inoculation in the pariſh of Buckland, where I reſide, is this: In the courſe of the laſt autumn, having received proper inſtructions from Dr. JENNER, I inoculated about 450 perſons of all ages; and I am now employed with the children who have ſince come into the world, with ſome few who were neglected or overlooked: and in re-inoculating all thoſe in whoſe caſes any thing dubious appeared."

The Medical Journal, for May 1801, contains a communication from the Rev. Mr. JENNER; who, in order to refute the falſe reports which have been circulated by ſome prejudiced perſons, with ſo much induſtry, publiſhed an account of his own practice. He informs us, that ſince the month of December 1799, he has inoculated nearly three thouſand perſons for the cow-pox; a very great number of whom have ſince been expoſed to the contagion of ſmall-pox, in every way that can be imagined, without its producing the leaſt effect.

To place this in a point of view at once ſtriking and within the reach of enquiry, he mentions the inoculation which took place at Burbage, in Wiltſhire, near the ſeat of the Earl of Aylesbury.

Aylesbury. Being there on a visit, he gave a general invitation to people of all descriptions, to come and be inoculated. His offer was accepted by men, women and children, to the amount of six hundred; who went through the cow-pox in the usual mild way. Some months afterwards, the village was visited by the small-pox; which made dreadful havoc among those who had not availed themselves of Mr. Jenner's invitation; while those who had accepted it remained secure; although there was a general intercourse between them during the whole period. The Rev. Mr. Ferryman inoculated fifty at Oakley, and three hundred at Wooburn, with the greatest success. The Rev. Mr. Close, of Hordle, near Lymington, has also inoculated a very considerable number in that neighbourhood.

The Rev. Mr. Reed, in a letter to W. Fermor, Esq. says, "Seeing that a petition is before the House of Commons from Dr. Jenner, and wishing him every success which his most important discovery deserves, I have enclosed a certificate of the persons inoculated by me without a single adverse circumstance; having once before communicated to you some particulars in a conversation at your house. I shall send the same list to Lord Buckingham, and the Duke of Grafton; in whose immediate neighbourhood this experiment took place." Then follows a list of 1578 persons inoculated by him in various parishes in the neighbourhood of Whittlebury forest, with the cow-pox, from March 1800 to March 1802. Mr. Reed then adds, "The preceding persons were inoculated by me, gratis, in my own parish, and in other parishes at the request of clergymen and other respectable persons; frequently under circumstances which exposed them to the greatest danger of the small-pox, both at the time of inoculation and since, without a single instance of any one receiving the small-pox, or suffering from the inoculated cow-pox to such a degree as to excite any well-founded alarm, or to require either medical or surgical assistance."

The Rev. Dr. Booker of Dudley, in Staffordshire, affords another memorable example of a clergyman, who considers nothing inconsistent with the sacred function that tends to promote the welfare and happiness of mankind. In a sermon he published on this subject, he says, "A clergyman in Lancashire thus

thus writes to the judicious discoverer. 'A few years ago I was in the habit of burying two or three children almost every evening, during the spring and autumnal seasons, who had died of the small-pox; but now the disease has entirely ceased to send a single victim to the grave. I have inoculated for the cow-pox upwards of three thousand persons; and the small-pox has no longer any existence in my neighbourhood."

Dr. Booker, then states a strong case in proof of the cow-pox being a lasting preventive of the small-pox. "But happily we need not go beyond the limits of our own neighbourhood for a very signal fact, proving the sovereign and permanent efficacy of this antidote: a fact which, from scrupulous investigation and enquiry, I can authenticate. A woman, now residing in an adjacent village, far advanced in years, had, when young, the disease of which we are speaking; but never had the small-pox. More than twenty years afterwards, having married, her husband and five of her children were assailed by that dreadful distemper. Her husband died; and her children narrowly escaped a similar fate. Notwithstanding she was constantly with them, handling their contagious bodies, and inhaling their pestilential breath, she received not the slightest symptom of infection. Upwards of forty years after her having the cow-pox, she nursed and constantly attended upon four of her grand children, during their illness of the casual small-pox; which proved mortal to all of them, as it had before done to her husband; yet again no symptom of the disease affected her: So that here we have a double proof that the cow-pock is not merely a temporary and transient security against the small-pox, thus remarkably fatal in one family; but that the security afforded by it is durable, as the means are simple." Dr. Booker observes, it is a mark of pride and ignorance to prefer means that are attended with labour and expense, to those which are simple and easy. He says, the inoculation of the small-pox assuages the violence of the disease; but this sooths it into peace; or, to speak more properly, repels and counteracts its rage.

When enumerating the objections to the inoculation of the small-pox, he says, "There are times when every neighbourhood is free from the contagion of that disorder: yet some parent.

rent, anxious for the ſafety of his offspring, cauſes it to be introduced, by having them inoculated. We will ſuppoſe that ſuch parent's individual aim is accompliſhed; that his children happily recover, and are thus ſhielded from danger of future contagion; but what becomes of the children of his neighbours? From his houſe infection flies around; the children of his neighbours, (as dear to them as to his heart are his own) from aſſociation or communication of ſome ſort or other, take the caſual ſmall-pox, and are hurried by it to the grave! Other children derive from the latter the virulent infection, and ſhare a ſimilar fate; as when a ſmall pebble is thrown into a tranquil lake, circles diverge rapidly wider and wider, till the whole ſurface becomes troubled. An entire neighbourhood or populous pariſh, may have melancholy cauſe to deplore, and ſeverely condemn the firſt introduction of ſuch a diſorder. Thus a ſingle perſon, from a natural ſolicitude for the welfare of one particular child, may eventually occaſion the death of thouſands. "A little leaven leaveneth the whole lump. A ſingle ſpark may lay a city in aſhes."

Dr. Woodville ſays, "It has been aſſerted that perſons have had the ſmall-pox after having been affected with the cow-pox; and ſome facts have been publiſhed with a view to ſhew that inſtances of this kind have actually happened. But all theſe, as far as I have ſeen, have been very defective in not affording ſufficient proof, that the affection, ſuppoſed to have been the cow-pox, was in reality that diſeaſe. On the other hand, the inſtances which have been brought forward to prove that thoſe who had undergone the genuine cow-pox reſiſted the infection of the ſmall-pox are unqueſtionably deciſive, and ſufficiently numerous to eſtabliſh the fact in the moſt ſatisfactory manner. This circumſtance then appears to be as much a general law of the ſyſtem, as that a perſon having had the ſmall-pox is thereby rendered unſuſceptible of receiving the diſeaſe a ſecond time: for of all the patients whom I inoculated with variolous matter, after they had paſſed through the cow-pox, amounting to upwards of four hundred, none were affected with the ſmall-pox; and it may be remarked, that nearly a fourth part of this number was ſo ſlightly affected with the cow-pox, that it neither produced any perceptible indiſpoſition nor puſtules."

Dr. THORNTON, while he was phyſician of the Mary-le-bone Diſpenſary, publiſhed a treatiſe on vaccine inoculation, entitled, *Facts decisive in favour of the Cow-pox.*

Dr. Thornton gives a hiſtory of vaccine inoculation in the county of Weſtmoreland. When at Lowther, the ſeat of the late Earl of Lonſdale, in compliance with the requeſt of his Lordſhip, he inoculated above a thouſand perſons with vaccine matter. He repeatedly put ſeveral of them to the teſt of the ſmall-pox, both by inoculation, and by expoſure to the natural infection; which gave the neighbourhood ſufficient proof that the cow-pox is a preventive of the ſmall-pox. Dr. Thornton proves, by the high authorities of Baron Dimſdale and Dr. Heberden, that inoculation of the ſmall-pox is more detrimental than beneficial to ſociety, on account of its ſpreading the natural infection.

"The following pathetic paſſage in Dr. Thornton's work, (ſays Mr. Ring) may perhaps make ſome impreſſion on thoſe who are ſo unfeeling as to vindicate the inoculation of the ſmall-pox, in preference to that of the cow-pox:"—

"The cow-pox never kills, the natural and inoculated ſmall-pox not unfrequently. If the whole merit of the cauſe of vaccine inoculation depended on this ſingle point, it might reſt ſecure, as the greateſt diſcovery ever made. The cow-pox never deſtroys life! Glorious tidings!—Happy communication! I, who have loſt by ſmall-pox inoculation my firſt born child; a boy who, not alone in his parent's eye, but to all who knew him, promiſed the fulfilment of every wiſh—have a juſt right to exult in the preſent fortunate diſcovery of Dr. JENNER. How his lovely form was defaced, and what his ſufferings were, before death ſnatched him to an early tomb,—has been drawn by me with a trembling hand, when I wrote my ſection on the ſymptoms and ravages of the ſmall-pox! So faithful is the portrait, that I have often witneſſed tears to flow in abundance, when this ſection has been read by others, as bringing to recollection many a ſimilar diſtreſſing ſcene, exhibited by ſome favorite child, or by ſome friend's or relation's child. My tears are now wiped away· and may their's be alſo, by the pleaſing view of the preſent ameliorated condition of humanity." He likewiſe

likewiſe obſerves, "There ſcarce needs a comment on the advantages of the cow-pox over the ſmall-pox. The bleſſing of viſion, ſo often deſtroyed by a *small-pox pustule* settling on the eye is but too obvious to be much inſiſted on."

Mr. JOHN RING, in a letter addreſſed to the Editors of the Medical and Phyſical Journals, ſays, "Excluſive of other falacious appearances which have given riſe to miſtakes in the practice of the new inoculation, ſuch as anomalous puſtules, there is another fertile ſource of error: the chicken-pox is frequently miſtaken for the ſmall-pox. Several inſtances of this kind have fallen under my own obſervation within a ſhort time. Hence, perſons who had undergone vaccine inoculation, have been ſuppoſed to have the ſmall-pox in the natural way, when the diſeaſe was the chicken-pox; and this latter has in many caſes been inſerted by inoculation, inſtead of the ſmall-pox. While unfavourable caſes are circulated with great induſtry, by profeſſed enemies of vaccine inoculation, or its *pretended friends*, it appears to me that the real friends of the practice, lulled into a ſtate of falſe ſecurity, are become rather remiſs, and being convinced themſelves, they leave the field to their more active opponents, who improve this favourable occaſion to their own advantage."

"The mildneſs of the cow-pox is now undeniable! but, in regard to its efficacy as a preventive, there is a doubt remaining in the minds of many perſons, not much experienced in the practice, which challenges farther inveſtigation. I conſider it, therefore, as a duty to the public, to the cauſe of truth, and to Dr. JENNER, to declare, that having inoculated with vaccine virus as many as my other avocations would permit, and having particularly ſought for patients in thoſe places where the ſmall-pox raged, I have never yet been able to diſcover a ſingle inſtance, where any one who had undergone vaccine inoculation proved ſuſceptible of the infection of the ſmall-pox. Theſe proceedings have been watched with a jealous eye, by perſons not intereſted in concealing any real or apparent failure; whoſe ſilence, after the moſt ſevere ſcrutiny, is a ſtronger argument in favour of the new practice, than any atteſtation of mine. I have now inoculated above eleven hundred, who have gone through the vaccine affection in a regular way; and after convincing

myſelf of the certainty of this preventive, by repeated inoculations of variolous matter, left the taſk of putting the remaining part of my patients to the teſt of variolous contagion in the natural way to their parents; and their compliance with my requeſt has been ſo general, that independent of accidental and unavoidable expoſure, I have reaſon to believe, at leaſt nine out of ten have been voluntarily ſubjected to that teſt.

"It neceſſarily follows from theſe obſervations, that the preventive employed by ſome practitioners is leſs efficacious; or the teſt to which their patients are afterwards ſubmitted, more powerful. In order to decide this queſtion, if any gentleman who has infected two, ten, or twenty of his own vaccine patients with variolous matter, will take the trouble of inoculating mine with the ſame, I will furniſh him with at leaſt a thouſand, on whom he may exerciſe his ſkill. This offer, the opponents of vaccine inoculation and its pretended friends, ought to accept, or in decency to be ſilent." Towards the cloſe of the laſt volume of his work he ſays, "It is now incumbent on me, to give a conciſe account of my own practice, ere I cloſe this volume. The number whom I have vaccinated at this time (May 1803), amounts to upwards of two thouſand. The more I ſee of the practice, the more I am confirmed in my opinion, that it may be relied on as a ſecurity againſt the ſmall-pox."

THE ADVANTAGES OF COW-POCK INOCULATION.

I may now adopt the language of Dr. Mac Donald, of Hamburgh, who has publiſhed a treatiſe on the cow-pox, in German and in Engliſh, and ſay, "I hope, from the above hiſtories, every one of my readers will be convinced of the efficacy of the cow-pox inoculation rendering the perſon unſuſceptible of the variolous infection. Had this fact been aſcertained by one ſingle obſerver, objections would be deemed juſtifiable; but as I have adduced a numerous and reſpectable evidence, all tending to confirm this point, no reaſonable doubt can be entertained upon the ſubject. I think it therefore unneceſſary to cite more teſtimonies

teſtimonies in favour of vaccine inoculation,—though a great number equally reſpectable as thoſe already mentioned, remain unnoticed: but ſhall now proceed to conſider the comparative merits of the variolous and vaccine inoculation.

"It cannot be denied, but the inoculation of the ſmall-pox has proved to mankind a ready means to alleviate and eſcape the danger of a moſt diſtreſſing diſorder; ſtill, notwithſtanding theſe happy effects, the inoculated ſmall-pox is ſometimes accompanied with ſymptoms which give juſt cauſe for alarm, and often prove fatal under the moſt judicious management.

"Were I (ſays Dr. Mac Donald) to record all the diſtreſſing ſcenes which frequently attend the inoculated ſmall-pox, or relate the ſad hiſtories of thoſe unfortunate families who, in conſequence of inoculation have felt the ragings of this dire diſorder; the ſtouteſt heart would ſhrink with horror, and drop a tear of pity over the ſufferings of humanity. I would wiſh to drop this ſubject, for my pen can give but a faint ſketch of thoſe pictures of ſingular diſtreſs, which every phyſician of even moderate experience has witneſſed.

"Fancy to yourſelf one of theſe little innocent ſufferers, ſtretched out, and covered with one continued ſore; threatened with ſuffocation, uttering the agonies he feels, by piercing heart-wounding groans.—Obſerve, how his mouth foams; liſten to the grindings of his teeth; ſee how he thruſts his little trembling tongue betwixt them, and how piteouſly it is wounded! Look! how he is agitated with the moſt dreadful convulſions! His feeble limbs are twiſted and contorted, and threaten diſlocation; his frame bends backwards; is lifted up and thrown down again!—Theſe fits now increaſe,—then ceaſe—alas! only to return with redoubled violence.—Miſery calls aloud for help, help!—but calls in vain.—New convulſions ſucceed:—he foams—ſtruggles—gaſps—gaſps again—and expires!

"If at ſcenes like theſe your heart would bleed, what muſt be the feelings of a fond parent when this deſtroying ſcourge nips in the bud the faireſt bloſſom of all his hopes? What renders theſe caſes often more deplorable is, that they ſometimes happen under circumſtances ſtill more diſtreſſing. Before me lie the records of two unfortunate families. In the one, a father and four

four of his children were inoculated for the ſmall-pox; the eruptions proved of the confluent kind; the father and two children died, two recovered. He left a widow and her two infants in the greateſt miſery. The other is of a young widow, who loſt her huſband at the early age of twenty-four. One infant at the breaſt was left her; which in her pitiful ſituation, conſtituted her only conſolation. Soon after, the ſmall-pox began to rage in the city where ſhe lived; ſhe therefore was adviſed by her friends to inoculate her little boy. With reluctance, as if preſaging her impending misfortune, ſhe conſented. Her fears, alas! were but too well founded: on the day preceding the eruption, the child was ſeized with convulſive fits, and expired on the tenth day.

"One ſmiling boy, her laſt ſweet hope ſhe warms,
Huſh'd on her boſom, circled in her arms;
Daughter of woe!—ere morn, in vain careſs'd,
Clung the cold babe upon thy milkleſs breaſt,—
With feeble cries thy laſt ſad aid requir'd,
Stretch'd its ſtiff limbs, and on thy lap expired.

DARWIN.

"It may be ſaid, (continues Dr. Mac Donald) that ſuch diſtreſſing caſes as theſe are rare. I grant it: and it is happy for humanity that it is ſo: ſtill no one can be certain that ſuch a dreadful misfortune may not befal himſelf and his family. By inoculation for the ſmall-pox one has a chance, and indeed a very great one, to be ſaved from the mortal effects of this dreadful diſeaſe; yet one has no certainty. Should therefore means be offered to eſcape with certainty a dangerous and deſtructive diſeaſe, would it not be an inducement to ſubſtitute them for thoſe, which only give you a chance. In my opinion, there cannot be a moment of heſitation, but certainty muſt be preferable to chance: and from the hiſtory I have delivered, I with ſafety dare offer the inoculation of the cow-pox, as the only certain means of eſcaping the danger of the ſmall-pox."

A view of the deſtructive influence of the ſmall-pox will preſent us with a vaſt number of weighty and pathetic arguments in favour of vaccine inoculation. Dr. Sacco, of Milan, who has publiſhed

publiſhed on this ſubject, aſſerts that the inoculation of the cow-pox will make an epoch in the annals of medicine and humanity. He ſtates, that in Europe, according to the moſt moderate calculation, fifteen millions of human beings fall victims to the ſmall-pox, every twenty-five years. In Rome alone, ſix thouſand periſhed by that deſtructive diſeaſe in the ſhort ſpace of ſix months.

It is calculated that in France about one in fourteen dies of the ſmall-pox. The total number of deaths in a year is eſtimated at nine hundred thouſand, on an average; and the number of deaths from the ſmall-pox, at upwards of ſixty-four thouſand. Dr. Odier ſtates, that from the year 1661 to 1772, 2,538,450 perſons died in London; 139,432 of whom died of the ſmall-pox: ſo that one in fourteen died of that diſeaſe. In the ſame ſpace of time, 76,000 perſons died at Geneva; 3972 of whom died of the ſmall-pox; which is about one in twenty. At Edinburgh, ſays Dr. Odier, Dr. Monro informs us, that from the year 1744 to the year 1763, 24,322 perſons died; of whom 2441, that is more than one in ten, fell victims to the ſmall-pox. At the Hague, from the year 1755 to 1769, the number of deaths were 18,071; of whom 1450 died of the ſmall-pox, which is more than one in thirteen. In ſome places, our author declares, the ſmall-pox has proved ſtill more fatal. Dr. Lettſom ſays, "the annihilation of the ſmall-pox might be effected in the preſent year, ſhould a due ſenſe of ſelf-preſervation influence the community in general. Should the people of theſe kingdoms be thus actuated, about thirty-ſix thouſand inhabitants would be added to their population in the year 1802; and ſo progreſſively every ſubſequent year, till the next century; when the whole number, gained by the Jennerian diſcovery, would amount to about twelve millions of fellow creatures. This proves the important advantages of vaccine inoculation, which may hereafter ſnatch ſuch a vaſt number of victims from death."

A compariſon of the two diſeaſes, as to the mildneſs of their ſymptoms and the hazard to life which they may occaſion, will ſhew a very decided advantage in favour of the cow-pox; as no fatal inſtance of the natural cow-pox, as it affects the perſons employed in dairies, has ever been recorded. When both

diſeaſes

diſeaſes are introduced by artificial inoculation, they are each rendered much leſs ſevere: and here too the cow-pox preſerves its ſuperiority as a ſafer and a milder diſeaſe. But the moſt ſtriking point of difference, and that which renders the cow-pox ſo peculiarly valuable as a ſubſtitute for the ſmall-pox is, its not being, even in its moſt virulent ſtate, communicable by the air, by the breath, by effluvia, or in ſhort by any thing conſtituting contagion in the eſtimation of this term: but can only be propagated by the actual contact of matter from a cow-pox puſtule. It is this circumſtance, ſays Mr. Aikin, which gives it great importance, conſidered in an enlarged and extenſive view; ſince by adopting this diſeaſe to ſupply the place of the ſmall-pox, all the dread, and all the miſchief that is occaſioned by the unſeen agency of an active and formidable contagion is entirely removed; no anxious precautions are required, in order to avoid and inſulate an infected perſon, whoſe breath can ſpread diſeaſe on every ſide.

Another advantage is ſtated by Dr. Jenner: "The cow-pox has never been known to leave impreſſions in the ſyſtem unfavourable to health; but has often been obſerved to correct a ſcrofulous diatheſis, when exiſting in the conſtitution. No peculiar diſeaſes have been noticed in thoſe who have undergone the cow-pox after a lapſe of time."

Dr. Huſſon, of Paris, who has publiſhed a book on the cow-pox, after enumerating the various other well known advantages ariſing from vaccine inoculation, mentions different inſtances in which it had proved a remedy for other diſeaſes. One was a caſe of intolerable head-ache of ſeveral years ſtanding; which had been conſidered as incurable. The other a caſe of ſcrofula, cough, and ſhortneſs of breath. All theſe ſymptoms, we are informed, have totally diſappeared. Various other diſeaſes are ſaid by ſeveral very eminent medical gentlemen to have been cured by the cow-pox inoculation; but as theſe are conſidered rather accidental advantages, than the natural effect of vaccination, I omit to cite them; leſt by inducing my readers to expect too much from the cow-pox, their diſappointment ſhould lead them not to give its genuine and conſtant advantages their due importance. I ſhall therefore conclude the account

account of the advantages by preſenting my readers with the following paper, publiſhed by order of the Medical Council of the Royal Jennerian Society for the Extermination of the Small-Pox, entitled—

" A comparative view of the Natural Small-pox, Inoculated Small-Pox, and Inoculated Cow-Pox.

NATURAL SMALL-POX.

" For twelve centuries this diſeaſe has been known to continue its ravages, deſtroying in every year an immenſe proportion of the whole population of the world!!

A contagious diſeaſe: in ſome inſtances mild; but for the moſt part violent, painful, loathſome, and dangerous to life.

One in ſix, who have the diſeaſe, dies. At leaſt half of mankind have it; conſequently, one in twelve of the human race periſhes by one diſeaſe!! In London three thouſand annually; in the United Kingdom forty thouſand.

Circumſtances independent of contagion and mortality:—

1. One in three has the natural ſmall-pox in a *dangerous* form.
2. It produces *eruptions*, numerous, painful, and diſguſting.
3. Occaſions *confinement*.
4. *Loss of time*, and
5. *Expense*, more or leſs conſiderable, affecting individuals, families, pariſhes, &c.
6. Renders *precautions* for the moſt part unavailing.
7. *Medical treatment* neceſſary both during the diſeaſe and afterwards.
8. Leaves *pits*, *scars*, *seams*, &c. diſfiguring the ſkin, eſpecially the face: and
9. Is followed by *scrofula* in every form, diſeaſes of the ſkin, glands, joints, &c. blindneſs, deafneſs, &c. &c.

INOCULATED SMALL-POX.

A contagious diſeaſe; for the moſt part mild; but in ſome inſtances violent, painful, loathſome, and dangerous to life.

One in three hundred inoculated dies: In London, probably, one in one hundred.

The inoculation of the ſmall-pox having been but partially adopted, has become the means of ſpreading the infection, and

has thus increaſed its general mortality.—In London this increaſe has been in the proportion of ſeventeen in every thouſand.

Circumſtances independent of contagion and mortality:—

1. One in thirty or forty has the inoculated ſmall-pox in a *dangerous* form.
2. It produces *eruptions* in greater or leſs numbers.
3. Occaſions *confinement.*
4. *Loss of time,* and
5. *Expense,* ſometimes conſiderable.
6. Requires *preparation* by diet and medicine: care to avoid certain ſeaſons, as extremes of heat and cold: certain periods of life, as early infancy and old age; and certain ſtates of conſtitution, as general ill health, teething, pregnancy, &c. &c.
7. Renders *medical treatment* uſually neceſſary.
8. Is liable to produce *deformities* whenever the diſeaſe proves ſevere;—and to be
9. Followed by the ſame diſeaſes as above enumerated, though leſs frequently.

INOCULATED COW-POX.

Not contagious; and when properly conducted, uniformly mild, inoffenſive, free from pain or danger, and an infallible preventive of the ſmall-pox.

NEVER FATAL.

During a long ſeries of years, the cow-pox, accidentally received, has been conſidered as a preſervative againſt any future attack of the ſmall-pox. Many perſons in the dairy countries, who have had the former in their youth, have remained to old age unſuſceptible of the latter.

Circumſtances independent of contagion and mortality:—

1. The inoculated cow-pox is attended by no *danger.*
2. Produces a *pustule* on the *inoculated part only.*
3. Occaſions neither *confinement,*
4. *Loss of time,* nor
5. *Expense.*
6. Demands no other *precautions* than ſuch as reſpect the *conduct of the inoculation.*
7. Requires

7. Requires *no medicine:*
8. Leaves *no deformity* nor *disfiguration:* and
9. Excites *no subsequent diseases.*

With a knowledge of the facts contained in the above ſtatement, it is preſumed that no perſon can conſcientiouſly refuſe or heſitate to embrace the opportunity now providentially offered of preſerving his own family from ſo dreadful and deſtructive a peſtilence as the ſmall-pox; and of contributing his part towards its total extirpation. The new inoculation recommends itſelf to all claſſes: the rich are adopting it univerſally: their example may now be followed without expenſe by the poor, for whoſe immediate benefit the Royal Jennerian Society is eſtabliſhed."

OBJECTIONS ANSWERED.

That the introduction of the cow-pox as a ſubſtitute for the ſmall-pox ſhould meet with objections, is not only natural but highly proper. Inveſtigation is promoted by propoſing objections; and when a ſubject will bear cloſe examination, and will afford rational anſwers to apparently weighty objections, it proves itſelf to be valid, and founded upon a ſolid baſis. There can be no doubt but the cow-pox will continue to be cloſely inveſtigated for a conſiderable time. Its being practiſed and ſanctioned by a great number of the firſt medical gentlemen in almoſt every country in Europe, will expoſe it to the attention of the public in general, and induce every profeſſional gentleman who does not ſanction the practice, to ſcrutinize into its progreſs and conſequences.

The inoculation of the ſmall-pox had to contend with more weighty objections and ſtronger oppoſition when firſt introduced into England, than the cow-pox inoculation has now to oppoſe. How the inoculation for the ſmall-pox was viewed between ſixty and ſeventy years ſince, ſoon after it was firſt introduced, will appear from what was ſaid by the Chevalier Dennis De Coetologen, a phyſician and author of an univerſal

hiſtory of arts and ſciences, in two volumes folio; in which he ſays, "Note, that of late years a practice has prevailed here in England, which in the Roman Catholick countries is condemned as a criminal preſumption, and injurious to the divine providence, of inoculating or ingrafting the ſmall-pox." He then adds, after ſtating ſeveral other arguments for the inoculation uſed by thoſe who favoured it, "They pretend further, that it has been almoſt conſtantly obſerved, that the beſt ſort of ſmall-pox is hereby occaſioned; that the eruptions are few, the ſymptoms light, the danger next to none, the recovery eaſy, and *that the patient is equally ſecured from this diſtemper for the future, as he would be by having gone through it in the natural manner*:—which is not my ſentiment. All ſtomachs do not digeſt equally well the beſt aliments, whatever precautions may be uſed to diſpoſe the tone thereof towards it; therefore it is not ſurpriſing if for one child who recovers by this *criminal* practice, *ten at least are killed*; which is perhaps the reaſon that we have not heard of late ſo much of inoculating for the ſmall-pox as we did. The Sorbonne at Paris has fulminated this practice as criminal; which is perhaps one of the principal reaſons it has been ſo much in vogue here."

In a few years after this time a book was written by the Rev. David Some, intitled, "Inoculation impartially conſidered, and proved to be conſiſtent with reaſon and revelation:" which was publiſhed by Dr. Doddridge in 1750. In this book, among a variety of other objections to inoculation, that of its not being a preventive of the future infection of the natural ſmall-pox, is ſtated and anſwered. This clearly ſuppoſes that its being a preventive was then denied by ſome.

In the Encyclopædia Britannica, under the article Inoculation, after ſeveral other anſwers to objections are given, it is ſaid, 'Inoculation does not exempt from future infection;' to which the following anſwer is annexed. 'If by inoculation of the ſmall-pox the ſame diſeaſe is produced, the ſame effects may be expected from it when artificially produced, as in the natural ſmall-pox. It is inconceivable that a contagious ſubſtance, the very ſeminal matter of the ſmall-pox, ſhould propagate, inſtead of its own, another diſeaſe. De Haen is an acute phyſician,

ſician, and was a violent oppoſer of inoculating the ſmall-pox; but he never ſuppoſed that the matter of the ſmall-pox will produce any diſeaſe but itſelf. Obſervation alone determined the opinion, that the natural ſmall-pox does not attack a ſecond time: the ſame ſtands good in favour of the artificial diſeaſe; and to this *numberless* trials have been made without effect to re-infect thoſe in whom the ſmall-pox had taken place by inoculation.'

May not this anſwer with equal propriety be applied to the natural and inoculated cow-pox? If from time immemorial the natural cow-pox has proved a ſecurity againſt the ſmall-pox, and we by inoculation can produce the ſame diſeaſe, which after *numberless* trials reſiſts the infection of the ſmall-pox, may we not from analogy fairly conclude, that the inoculated cow-pox is an equal ſecurity as that of the inoculated ſmall-pox?

1. The firſt objection requiring an anſwer, is that made by perſons who object to any inoculation upon the ground 'that it is giving a perſon a diſeaſe to prevent one he might never be afflicted with, which evinces a diſtruſt of providence.'

The inoculated cow-pox, except in a very few caſes, is ſcarcely to be called a diſeaſe; but were it ſo, we ſhould remember that as the ſin of man brought diſeaſe into the world, to evade, oppoſe or deſtroy it, is not only his right, but, as far as is in his power, his duty. It is ſufficient to prove the lawfulneſs of a remedy, that it is proper for, and has by experience been found *in moſt cases*, effectual to the end for which it was uſed. When danger ſurrounds us, no conduct is more proper than to enquire into and purſue the means of eſcape. To neglect our ſafety is to ſink below the brutes, who by inſtinct avoid the evils to which they are expoſed. It is not proper to ſuppoſe that inoculation evinces a diſtruſt of providence, for we are not called to truſt providence but in the uſe of ſuitable means, except when thoſe means cannot be procured, or when every means in our power has been uſed to no effect. A reliance on providence does not imply, that we are not to prevent or oppoſe the evils which we foreſee, and which we have in our power to guard againſt by prudent precautions. Would ſuch objectors refuſe the means of leſſening the malignity and danger of diſeaſe in other inſtances?

ſtances? Let theſe ſcrupulous perſons ſay, whether, when God affords the diſcovery of the means of preſerving ourſelves from an impending evil, he forbids our availing ourſelves of that diſcovery? If our Maker offer us a remedy, is it not offending him to reject it?

2. Others object to the vaccine inoculation 'becauſe the diſeaſe came originally from the cow.'

"Who could have imagined (ſays Mr. Ring) that a prejudice would ariſe in any human mind againſt the vaccine virus, on account of its being a beſtial humour? That omnigenous maſs, the human body, is formed by the conflux of all ſorts of humours from all ſorts of animals as well as vegetables; and not likely to be tainted by the juices of an animal whoſe food is the herb of the field, whoſe beverage is the limpid ſtream. Could the brute animal be infected by the inſertion of morbid poiſons that originate in the human body, his blood might indeed be contaminated; but providence has kindly interpoſed and placed an inſurmountable barrier to fruſtrate ſuch unnatural attempts, by rendering the brute animal unſuſceptable of human contagion."

Let it be conſidered that the animals to which we are indebted for this powerful antidote, not only live on the moſt pure and ſimple diet; but that they are the moſt healthy of all the human ſpecies who make the milk and the fleſh of ſuch animals a part of their food. A medical gentleman who has written on this ſubject, and who ſometimes indulges himſelf in ſatirical remarks intended to excite the riſibility of his readers, ſays, "The prejudices entertained by ſome are not calculated to give the higheſt opinion of the enlightened ſtate of the human underſtanding, at the cloſe of the eighteenth century. I have repeatedly been aſked, whether, as the cow is a ſhort-lived animal thoſe who are inoculated from the cow will not be ſhort-lived alſo. Thoſe perſons who aſked this ſimple queſtion did not conſider, that the cow is not ſuffered to live half her days. They did not conſider that while ſhe is ſuffered to live no animal is ſo healthy. If however the philoſophers of the preſent day ſhould diſcover this to be an erroneous opinion, and that the cow carries about her the ſeeds of mortality, I hope no perſon will

will in future be ſo raſh as to ſit down to a dinner of roaſt beef and plum-pudding with beef-ſuet, in it; or venture on cuſtards or ice-cream, without aſking his phyſician, ſurgeon, and apothecary to be of the party. He ſays, a lady complained to a gentleman, that ſince her daughter was inoculated ſhe *coughs like a cow*; and ſome in the country ſay their children who have been inoculated, *bellow like bulls*. The ſame author in reply to a perſon who aſks, 'What may be the conſequences of introducing a beſtial humour into the human frame, after a long lapſe of years?' obſerves, "I beg leave to aſk in my turn if any perſon can ſay, what may be the conſequences, after a long lapſe of years, of introducing into the human frame *cow's milk, beef ſteaks* or *mutton chops*?"

However, when objections are ſeriouſly felt, they ſhould be ſeriouſly anſwered. Dr. Lettſom, in anſwering theſe kind of objections, ſays, "of the primary ſources of infectious diſeaſes little is yet clearly aſcertained; that ſome have originated from animals is certain; but of all animals the cow is moſt congenial to the habits of man: its food is ſimple and its diſeaſes are few; we are from infancy nouriſhed by its milk, and its fleſh conſtitutes a large portion of human aliment: and ſurely a particle of matter extracted from this animal, can excite no diſguſt, or rational idea of impurity: whilſt that of man, too often the creature of appetite and morbid indulgences, with juices vitiated by intemperance, and a conſtitution injured by vice, may indeed afford ſome ſuſpicion of contamination and impurity. But what forms the principal anſwer to this objection, is the matter of fact; that though the cow-pox has long exiſted in various parts of the counties of Gloceſter, Wilts, Somerſet, Buckingham, Devon, Hants, Suffolk, Norfolk, Leiceſter, Stafford, the vicinity of London, and in ſeveral other counties of England, likewiſe in Italy; and though many have been affected by it who have lived many years afterward; *yet it never has been ſuspected to leave behind it any other diſeaſe.*

3. It is objected, 'that according to Dr. JENNER, the diſeaſe is from the greaſy heels of a horſe, which renders it more objectionable than though it originated in the cow.'

It muſt be granted that the opinion of Dr. JENNER reſpecting the

the origin of the natural cow-pox is generally admitted to be well founded, as it is confirmed by repeated obſervations and inconteſtible experiments. But if this objection has any weight, it is removed by what has been ſaid in anſwer to the foregoing objection: for as the diſeaſe by inoculation does not paſs from the horſe to the human ſubject, but through the medium of the cow, and after going through its regular progreſs, leaves no unpleaſant conſequences either in the brute animal or the human ſubject, its originating from the heels of a horſe can form no rational objection to its being uſed as a preventive to the ſmall-pox. Beſides, a variety of caſes are cited by Dr. JENNER and others, proving that ſeveral perſons in the habit of dreſſing the heels of diſeaſed horſes, have been affected with ulcerous ſores very much reſembling the cow-pox puſtule; and which from experiments are ſuppoſed by Dr. JENNER to have rendered them unſuſceptible of the variolous infection. This, he obſerves, may account for blackſmiths in the habit of ſhoeing horſes ſo frequently reſiſting the ſmall-pox. Had this diſeaſe been of ſuch a nature as to leave any ſerious conſequences in the conſtitution, after it had finiſhed its progreſs on the hands of the perſon infected by it; the ſubject, long ere this, we may reaſonably ſuppoſe, would have excited the attention of perſons in ſuch employments; and the horſe would have been left to periſh, rather than they would have expoſed their health and their life by attending the beaſt in this diſeaſe. The health of almoſt every oſtler, farmer's man, and farrier, is an anſwer to this objection.

4. 'It is not univerſally approved nor practiſed by medical men.'

That a ſubject involving ſuch important conſequences ſhould excite the ſevereſt ſcrutiny from medical gentlemen, ſo far from being matter of regret, is matter of exultation; as not only their own repute is connected with it, but the health and life of their patients, and the happineſs of mankind. It is natural to ſuppoſe, that in a practice of this importance, which muſt be acknowledged is yet in its infancy, a long train of favourable circumſtances may preſent themſelves to one practitioner, and impel him to a cordial and zealous defence of the practice; while

while to another, several unfavourable cases may present themselves as the most prominent objects in his view, and constrain him at least to suspend his judgment on the validity of the practice, if not zealously to oppose it. Hence two persons, equally critical in their observations and impartial in their determinations, judging from their own experience, may entertain very different opinions respecting the same subject. It is not, therefore, from the experience of a few individuals the question is to be decided; but from an impartial view of the subject when taken in the aggregate.

Some gentlemen of the faculty, who have written in favour of vaccine inoculation, have written of other professional men who have opposed it as though their opposition arose from interested motives. In this case, it may be said, as of another description of professional men, 'that no persons write so severely against the priests, as the priests against each other!' They who have written in this style have not, perhaps, sufficiently considered, that those gentlemen of the faculty who strenuously recommend or openly oppose, the vaccine inoculation, have in their own minds, to balance their *present* and their *future* reputation and interest: for should time by repeated experiments prove their opinion on either side to be erroneous, the public, in the circle in which they move, will not forget to estimate their judgment in other cases by their judgment concerning the validity of the cow-pox. We may therefore reasonably conclude that men of sense will determine and act impartially on a subject which commands such general attention, and involves their own repute and the dearest temporal interest of the community. That the vaccine inoculation is coolly received by some medical men and avowedly disapproved by others, cannot be denied; but they who openly oppose it are but comparatively few; while the number who readily adopt and strenuously recommend it, is very great. I have before me a list of between two and three hundred physicians, and near five hundred surgeons who afford the practice their avowed and public sanction. Let the majority decide.

5. It is likewise objected that 'the cow-pox has failed in some instances to prevent the future infection of the small-pox.'

Were we to admit this objection in all its force, it would not afford a ſufficient argument againſt vaccine inoculation, to induce us with juſtice to ourſelves to relinquiſh the practice; for it only ſtates a failure in *ſome* caſes; to ſtate that it had failed in *many* would be to contradict a ſelf-evident fact. The inſtances in which it has failed, upon a compariſon of the whole number vaccinated, are very few indeed. But before it can be proved to have failed in any caſe, it is neceſſary clearly to aſcertain, 1, Whether the virus inſerted was taken from a genuine cow-pox puſtule. 2, Whether the inoculation was performed under ſuch circumſtances as might rationally enſure ſucceſs: and 3, Whether it produced ſuch effects has Dr. JENNER has declared to be the eſſential characteriſtics of the genuine cow-pox. In the next place it is neceſſary to prove, 1, That the diſeaſe with which the perſon is affected, who has had the cow-pox, is in reality the ſmall-pox: 2, That it produced the ſame effects as might have been reaſonably expected if the perſon had not been previouſly vaccinated: and 3, That the ſame effects might not have been produced by inoculating a perſon who had previouſly gone through the ſmall-pox.

Dr. JENNER, after deſcribing the cauſes and nature of a ſpurious cow-pox in the animal itſelf, enumerates other ſources of ſpurious cow-pox in the *human subject;* one where it is produced by the ſpurious diſeaſe in the brute animal; another where it is produced by genuine matter, which has ſuffered a decompoſition before it is taken from the cow; and the other, where it is produced by genuine matter which has ſuffered a decompoſition after it is taken from the cow.

Dr. Tierney gives an account of his having inoculated thirty perſons with one ſpecies of ſpurious matter, and ſeventy with another. The firſt was taken from a genuine puſtule on the tenth-day, at too late a period; the latter was procured from a medical man in the neighbourhood, and was *puriform* when Dr. Tierney received it.

Dr. JENNER ſtates ſome facts relative to the ſmall-pox very analogous to theſe caſes, and which may be conſidered as illuſtrative of them. In the 50th page of his work he ſays, "In ſome of the preceding caſes (mentioned in his work) I have noticed the

the attention that was paid to the ſtate of the variolous matter, previous to the experiment of inſerting it into the arms of thoſe who had gone through the cow-pox. This I conceive to be of the greateſt importance in conducting theſe experiments, and were it always attended to by thoſe who inoculate for the ſmall-pox, it might prevent much ſubſequent miſchief and confuſion. With a view of enforcing ſo neceſſary a precaution, I ſhall take the liberty of digreſſing ſo far as to point out ſome unpleaſant facts relative to miſmanagement in this particular, which have fallen under my own obſervation. A medical gentleman (now no more) who for many years inoculated in this neighbourhood, frequently preſerved the variolous matter intended for his uſe on a piece of lint or cotton, which in its fluid ſtate was put into a vial, corked and conveyed into a warm pocket; a ſituation certainly favourable for ſpeedily producing putrefaction in it. In this ſtate (not unfrequently after it had been taken ſeveral days from the puſtules) it was inſerted into the arms of his patients, and brought on inflammation of the inciſed parts, ſwellings of the axillary glands, fever, and ſometimes eruptions. But what was this diſeaſe? Certainly not the ſmall-pox; for the matter having from putrefaction loſt, or ſuffered a derangement in its ſpecific properties, was no longer capable of producing that malady; thoſe who had been inoculated in this manner being as much ſubject to the contagion of the ſmall-pox as if they had never been under the influence of this artificial diſeaſe; and many unfortunately fell victims to it who thought themſelves in perfect ſecurity." He mentions ſeveral other caſes under other inoculators, in which the practice was attended with the ſame ill ſucceſs as the former. In page 79, of the ſame work, he ſays, "To place this in its cleareſt point of view, *as the similarity between the action of the small-pox and the cow-pox matter is so obvious*, it will be neceſſary to conſider what we ſometimes obſerve to take place in inoculation for the ſmall-pox, when imperfect variolous matter is made uſe of." Having referred to an account of ſome anomalous appearances conſequent to the inoculation of the ſmall-pox, publiſhed in vol. iv. page 114, of the memoir of the Medical Society of London, by Mr. Charles Kite, ſurgeon of Graveſend, Dr. JENNER ſays, "To this copious evidence I

have to add ſtill more, in the following communications from Mr. Earle, ſurgeon, of Frampton-upon-Severn, in this county.

"SIR,

"I have read with ſatisfaction your late publication on the variolæ vaccinæ; and being, among many other curious circumſtances particularly ſtruck with that relating to the inefficacy of ſmall-pox matter in a particular ſtate, I think it proper to lay before you the following facts which came within my own knowledge, and which certainly tend to ſtrengthen the opinions advanced in pages 51 and 52 of your treatiſe.

"In March 1784, a general inoculation took place at Arlingham, in this county. I inoculated ſeveral patients with active variolous matter, all of whom had the diſeaſe in a favourable way; but my matter being all uſed, and not being able to procure any more in the ſtate I wiſhed, I was under the neceſſity of taking it from a puſtule which, experience has ſince proved, was advanced too far to anſwer the purpoſe intended. Of five perſons inoculated with this laſt matter, four took the ſmall-pox afterwards in the natural way; one of whom died. Although one of theſe caſes ended unfortunate, yet I cannot ſuppoſe that any medical man will think me careleſs or inattentive in their management; for I conceive the appearances were ſuch as might have induced any one to ſuppoſe that the perſons were perfectly ſafe from future infection. Inflammation in every caſe took place in the arm, and fever came on, with a conſiderable degree of pain in the axilla. In ſome of their arms the inflammation and ſuppuration were more violent than is commonly obſerved when perfect matter is made uſe of; in one there was an ulcer which caſt off ſeveral large ſloughs. About the ninth day, eruptions appeared which died away earlier than common, without maturation. From theſe circumſtances I ſhould ſuppoſe that no medical practitioner would ſcarcely have entertained a doubt but that theſe patients had been infected with a true ſmall-pox; yet I muſt confeſs that ſome ſmall degree of doubt preſented itſelf to me at the ſpeedy diſappearance of the eruptions; and in order, as far as I could, to aſcertain their ſafety, I ſent one of them to a much older practitioner than myſelf. This gentleman, on hearing the circumſtance of the caſe, pronounced the patient perfectly ſecure from future infection.

The

"The following facts are alſo a ſtriking proof of the truth of your obſervation on this ſubject. In the year 1789, I inoculated three children of Mr. Coaley, of Hurſt-farm, in this county. The arms inflamed properly; fever, and pain in the axilla came on preciſely the ſame as in the former caſes, and in ten days eruptions appeared, which diſappeared in the courſe of two days. I muſt obſerve, that the matter here made uſe of was procured for me by a friend: but no doubt it was in an improper ſtate: for, from the ſimilarity of theſe caſes to thoſe which happened at Arlingham five years before, I was ſomewhat alarmed for their ſafety, and deſired to inoculate them again; which being permitted, I was particularly careful to procure matter in its moſt perfect ſtate. All the children took the ſmall-pox from the ſecond inoculation, and all had a very full burden.

"As I think the communication of theſe caſes is a duty I owe to the public, you are at liberty to make what uſe you pleaſe of this letter.

I remain yours, &c.

JOHN EARLE."

"P. S. I think it neceſſary to obſerve, that I can pronounce with the greateſt certainty, that the matter with which the Arlingham patients were inoculated, was taken from a true ſmall-pox puſtule. I took it myſelf from a ſubject that had a very full burden."

Mr. Ring, in his work before alluded to, gives an account of a ſuppoſed metamorphoſis of the genuine into the ſpurious ſmall-pox, as deſcribed in the writings of Bond and Niedt; and of the 'baſtard' ſmall-pox, as mentioned in the works of Monro and others. Under theſe denominations the chicken-pox is implied.

"When, (ſays the ſame author) in conſequence of a blunt lancet, effete matter, or any other cauſe, an inefficient puſtule ſucceeds variolous inoculation, it is called a ſpurious puſtule. In this reſpect alſo the inoculation of the ſmall-pox preſerves a cloſe analogy with that of the cow-pox. Bond, who imagined that the genuine variolous matter, when expoſed to heat, produced a diſorder ſpecifically different, informs us, that eight perſons were inoculated with ſmall-pox matter at Philadelphia; and

and as the virus was to be carried twelve miles, it was previouſly well dried. Five of theſe perſons, he tells us, were in conſequence attacked with the ſpurious ſmall-pox: in the remainder, the operation proved abortive."

"Niedt obſerves, that many perſons who were inoculated with ſmall-pox matter had the ſpurious inſtead of the genuine diſtemper; and afterwards, when expoſed to variolous infection, caught the diſorder. This happened to the moſt celebrated and the moſt experienced phyſicians; and the report of theſe unfortunate caſes being ſoon circulated, it excited a number of enemies to inoculation: who contended, that it was unable to protect the patient againſt a relapſe of the ſmall-pox. This was the caſe at Berlin, in particular, inſomuch that almoſt all the practitioners of Berlin were the opponents of the inoculation of the ſmall-pox."

Dr. Niedt affirms, that "it is extremely difficult in many caſes to diſtinguiſh one ſpecies of eruption from another, and particularly, to diſtinguiſh the genuine ſmall-pox from the ſpurious. "All the caſes which I have adduced, (ſays Dr. Niedt) evince, that inoculation is not a matter of ſuch trivial importance; ſince the moſt experienced and celebrated phyſicians have committed miſtakes."

Dr. Lettſom confirms theſe facts, when he ſays, "It is not in vaccine inoculation alone that miſtakes have been committed, even by practitioners of eſtabliſhed character. I lately attended two young perſons under the ſmall-pox, each an only child of conſiderable family, who had been inoculated two or three years before, by reſpectable gentlemen; and the mothers of the children ſhewed me what they conceived to be the marks or pitting from the inoculated ſmall-pox: happily, they both recovered from an alarming eruption of the diſeaſe. But two relations, I once claimed, who were inoculated with matter, ſuppoſed to be variolous, by an eminent inoculator, afterwards caught the ſmall-pox, on one of whom it proved fatal."

The following is an extract of a letter from Dr. Wall of Oxford: "Where poſitive demonſtration cannot be adduced, analogy may be called in to our aid. The hiſtory of the inoculated ſmall-pox will afford us much aſſiſtance. A gentleman of this

this neighbourhood inoculated the inhabitants of two or three villages, as he thought, with variolous matter; in conſequence of which, an eruptive fever, and a mild form of diſorder reſembling the ſmall-pox, came on at the uſual time. But after theſe people had been well ſome months, nearly one half of them took the ſmall-pox by contagion, and ſome had it very unfavourably. About the ſame time a gentleman of eminence in the profeſſion, reſiding in Kent, publiſhed, I think in vol. iv. of the memoirs of the Medical Society of London, with great candour, an account of a ſimilar failure in variolous inoculation under his care. Now let me aſk, do theſe caſes, and many more of the ſame kind excite in any ones mind the ſmalleſt doubt whether the artificial introduction of variolous matter into the human body is a certain preventive of any ſubſequent influence of that matter on the ſame perſon, either naturally or by inoculation? Is it not immediately concluded, that there muſt have been ſome error in the conduct of the inoculation; and that thoſe perſons who were ſuppoſed to have had the ſmall-pox a ſecond time, certainly had in the *firſt* inſtance, ſome other fallacious eruption, and not the genuine viriola? In the caſe of the vaccine diſeaſe, we ought to reaſon in the ſame way. With reſpect to the three exceptions which have occurred here, (as I do not believe they ever had the genuine cow-pox) they have never ſhaken my faith in the truth of the general law, which I think has been as demonſtrably proved as any propoſition in natural philoſophy or geometry; and I have no doubt but the time will come when the medical world will expreſs its wonder, that ſo many difficulties ſhould have been raiſed upon ſuch ſlight foundations, to prevent the progreſs of a diſcovery ſo highly advantageous to mankind, and ſo honourable to the diſcoverer."

Mr. Ring, among ſeveral other inſtances in which the chicken pox has been miſtaken for the ſmall-pox, mentions one in the caſe of a child of Mr. Silk, in Parker's-rents; concerning which he ſays, "Two or three medical men having ſuſpected the diſorder to be the ſmall-pox, I was applied to, having inoculated the child with the cow-pox a conſiderable time before. To prevent any miſrepreſentation from taking place, I requeſted

Dr.

Dr. Willan to examine the child in whom the eruption appeared, whose opinion was expressed to me in writing, in the following terms:—"The eruption on the child in Parker's-rents is the varicella: all the pustules which now remain visible having the precise characteristics of the chicken-pox, and none of them the hard, inflamed, and extended base, peculiar to the small-pox."

In connection with this objection it is necessary to observe what Dr. JENNER states concerning the susceptibility of some constitutions of the future infection, in a partial degree, of the small-pox; even though the person has previously undergone the genuine variolous infection.

"As the effects of the small-pox inoculation on those who have had the cow-pox will be watched with the most scrupulous eye by those who prosecute this enquiry, it may be proper to bring to their recollection some facts relative to the small-pox, which I must consider here as of consequence; but which hitherto seem not to have made due impression. It should be remembered, that the constitution cannot by previous infection be rendered totally unsusceptible of the variolous poison; neither the casual nor the inoculated small-pox, whether it produces the disease in a mild or in a violent way, can perfectly extinguish the susceptibility. The skin, we know, is ever ready to exhibit, though often in a very limited degree, the effects of the poison when inserted there: and how frequently do we see eruptions among nurses, when much exposed to the contagion; and these sometimes preceded by sensible illness! yet should any thing like an eruption appear, or the smallest degree of indisposition upon the insertion of the variolous matter on those who have gone through the cow-pox, my assertions respecting the peculiarities of the disease, might be unjustly discredited.

"The following communication from Mr. Fewster affords a clear elucidation of this fact:—Mr. Fewster says, 'On the third of April 1797, I inoculated Master H. aged fourteen months, for the small-pox. At the usual time he sickened, had a plentiful eruption, particularly on his face, and got well. His nurse-maid, aged twenty-four, had many years before gone through the small-pox in the natural way, which was evident from her being

being much pitted with it. She had used the child to sleep on her left arm with her left cheek in contact with his face, and during his inoculation he had mostly slept in that manner. About a week after the child got well, she (the nurse) desired me to look at her face, which she said was very painful. There was a plentiful eruption on the left cheek, which went on to maturation. On enquiry, I found that three days before the appearance of the eruptions, she was taken with slight chilly fits, pain in her head and limbs, and some fever. On the appearance of the eruption these pains went off, and on the second day of the eruption she complained of a sore throat. Whether the above symptoms were the effects of the small-pox, or a recent cold, I do not know. On the fifth day of the eruption I charged a lancet from two of the pustules, and on the next day I inoculated two children, one two years, the other four months old, with the matter. At the same time I inoculated the mother and eldest sister with matter taken from Master H. On the fifth day of their inoculation *all* their arms were inflamed alike; and on the eighth day, the eldest of these, inoculated with matter from the nurse, sickened, and the youngest on the eleventh. They had both a plentiful eruption, from which I inoculated several others who had the disease very favourably. Soon after a man in the village sickened with the small-pox, and had a confluent kind. To be convinced that the children had had the disease effectually, I took them to his house and inoculated them in both arms with matter taken from him; but without effect."

The following is a letter, addressed to Dr. JENNER, on the same subject.

"Dear Sir,

"Society at large must, I think, feel much indebted to you for your enquiries and observations on the nature and effects of the variolæ vaccinæ, &c. As I conceive what I am about to communicate to be of some importance, I imagine it cannot be uninteresting to you; especially as it will serve to corroborate your assertion of the susceptibility of the human system of the variolous contagion, although it has previously been made sensible of its action. In November, 1793, I was desired to inoculate a person with the small-pox: I took the variolous matter from a child under

the diſeaſe in the natural way, who had a large burden of diſtinct puſtules. The mother of the child being deſirous of ſeeing my method of communicating the diſeaſe by inoculation, after having opened a puſtule, I introduced the point of my lancet in the uſual way on the back part of my own hand, and thought no more of it until I felt a ſenſation in the part, which reminded me of the tranſaction. This happened upon the third day; on the fourth, there were all the appearances common to inoculation; at which I was not at all ſurpriſed; nor did I feel myſelf uneaſy upon perceiving the inflammation continue to increaſe to the ſixth and ſeventh day, accompanied with a very ſmall quantity of fluid; repeated experiments having taught me it might happen ſo with perſons who had undergone the diſeaſe, and yet would eſcape any *conſtitutional affection:* but I was not ſo fortunate for on the eight day I was ſeized with all the ſymptoms of the eruptive fever, but in a much more violent degree than when I was before inoculated; which was about eighteen years previous to this, when I had a conſiderable number of puſtules. I muſt confeſs I was now greatly alarmed, although I had been much engaged in the ſmall-pox, having at different times inoculated not leſs than two thouſand perſons. I was convinced my preſent indiſpoſition proceeded from the inſertion of variolous matter, and therefore anxiouſly looked for an eruption. On the tenth day I felt a very unpleaſant ſenſation of ſtiffneſs, and heat on each ſide of my face, near my ear, and the fever began to decline. The affection in my face ſoon terminated in three or four puſtules, attended with inflammation; but which did not maturate, and I was preſently well.

I remain, dear Sir,

THOMAS MILES."

6. It is objected by ſome, that 'though the vaccine inoculation be a preventive of the ſmall-pox, it will only be ſo for a ſhort time.'

This objection, as far as I can learn, has more effect on the minds of thoſe who are enquiring in order to decide and to act for themſelves and their children, than any other. Many are conſtrained to admit that the vaccine inoculation produces a diſeaſe ſo mild as not to be worthy of the name of a diſeaſe; that

that it is attended with preſent advantages which render it every way preferable to the ſmall-pox inoculation; and that it certainly ſecures againſt the infection of the ſmall-pox for ſome time, who are led to ſuppoſe, according to the opinion of ſome, that it will be a preventive but for about three or four years. No objection can reſt upon a more uncertain foundation than this, being founded merely upon conjecture. The few inſtances which have occurred of perſons who are ſuppoſed to have had the ſmall-pox, after having been affected with the cow-pox, between two and three years, do not deſerve that importance which ſome are diſpoſed to attach to them. For theſe perſons muſt have been vaccinated when the ſubject was but in its infancy, and when the practitioner could not have had his judgment of the nature and characteriſtics of the cow-pox matured by experience and obſervation. Beſides theſe caſes, as far as I have read or heard, where the perſons are admitted to have had the genuine cow-pox, were of ſuch a nature as have induced ſome medical gentlemen to give it, as their opinion, that the diſeaſe was not the genuine ſmall-pox. It is admitted, that ſome others of the medical profeſſion, of equal judgment and impartiality, were of a contrary opinion; but ought we to relinquiſh a practice of ſuch vaſt importance upon a few doubtful caſes? Were this objection ſupported by truth, facts would by this time begin to roll in upon us, from Gloceſterſhire and London, where vaccine inoculation was firſt practiſed, like an overwhelming flood. Dr. JENNER commenced the inoculation on the 14th of May, 1796.

Time only can more fully decide this objection. Analogy, however, would lead us to conclude, that the inoculated cow-pox is as laſting a ſecurity as the caſual cow-pox. A variety of facts have been known in the counties of Gloceſter, Somerſet, Wilts, Hants, and other parts of the kingdom, where perſons, who had the caſual cow-pox from ten to fifty years ago, have ever ſince been preſerved from the infection of the ſmall-pox. Several caſes have come to my own knowledge which are not publiſhed; but among a large number that might be cited from various publications, the following caſes will ſhew what weight there is in this objection.

The

The Earl of Berkeley, in a letter to Dr. Jenner, says, "there is an old servant in my family, on the verge of seventy, who had the cow-pox from milking cows when a boy. From that time, he has never been in the least cautious in guarding himself from the small-pox; but has exposed himself again and again, without being sensible of its effects."

William Fermor, Esq. in Oxfordshire, in a book he has published on this subject, mentions a number of cases of persons having been preserved for many years by the cow-pox. He mentions one person, after having had the cow-pox six years, who was twice inoculated for the small-pox, at the Small-pox Hospital, without effect. Sixteen years after, he attended his own children when under the small-pox, without receiving infection. In another case, the patient had the cow-pox thirty years ago, and four years after was inoculated without effect; three and twenty years after that, his family were inoculated for the small-pox, and were infected; but he escaped, though he attended them the whole time.

If these cases were not sufficient, a long catalogue of facts might be produced equally strong, to prove that the cow-pox is a permanent preventive of the future infection of the small-pox. But, fully to meet this objection, as the cow-pox is evidently a mild and a safe disease, persons having any doubt of the security of their children, may have them inoculated some time after with the small-pox; and thereby afford to themselves and their families, the fullest satisfaction of their security from the future infection of that dreadful malady, and at the same time evince to their friends around them the permanent advantages of the Jennerian Discovery.

FINIS.

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